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BRISTOL ISWMF

Solid Waste Permit No. 588 September 2026 Monthly Compliance Report

CITY OF BRISTOL | 2655 Valley Drive, Bristol, VA 24201 | 276-645-7233

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Introduction

On behalf of the City of Bristol, Virginia (City), SCS Engineers has prepared this report to the Virginia Department of Environmental Quality (VDEQ) in accordance with Item 8.iii in Appendix A of the Consent Decree between the City and VDEQ. This report provides updates regarding the progress towards completion of the items outlined in Appendix A of the Consent Decree between the City and VDEQ. The following sections outline progress during the month of September 2026 related to Solid Waste Permit (SWP) No. 588.

1 GAS COLLECTION

The following sections describe the steps the City, in collaboration with its consultants and contractors, has taken to improve the operation, monitoring, and performance of the facility's landfill gas collection and control system (GCCS).

Surface and Leachate Collection Emissions

SURFACE EMISSIONS

SCS performed surface emissions monitoring on September 4, 2026; September 10, 2026; September 18, 2026; and September 25, 2026. These weekly surface emissions monitoring (SEM) events were performed in accordance with Item 1.i in Appendix A of the Consent Decree between the City and VDEQ. SCS also performs quarterly SEM at the landfill in accordance with regulatory requirements.

The details and results of the SEM are included in Appendix A. A summary of the outcomes is provided in Table 1.

Table 1. Summary of August Surface Emissions Monitoring

Description	September 4, 2026	September 10, 2026	September 18, 2026	September 25, 2026
Number of Points Sampled	168	168	168	168
Number of Points in Serpentine Route	100	100	100	100
Number of Points at Surface Cover Penetrations	68	68	68	68
Number of Exceedances	0	0	0	0
Number of Serpentine Exceedances	0	0	0	0
Number of Pipe Penetration Exceedances	0	0	0	0

During the four weekly monitoring events conducted in September, there were no locations where a methane concentration above the regulatory threshold was recorded.

MONITORING OF LEACHATE COLLECTION COMPONENTS

Monitoring of the leachate, witness zone, northern cleanouts, and gradient control clean-outs at the southern end of the landfill occurred on September 2, 2026. The results of that monitoring are included in **Table 2**. Where possible (i.e. where minimal vacuum wasn't already applied), adjustments were made to reduce the applied vacuum at wells with oxygen concentrations greater than 5%.

Table 2. Leachate Cleanout Pipe Monitoring Results

Description	ID#	Record Date	CH ₄ (% by Vol)	CO ₂ (% by Vol)	O ₂ (% by Vol)	Balance Gas (% by Vol)	Initial Temp (°F)	Adj Temp (°F)	Initial Static Pressure (in H ₂ O)	Adj Static Pressure (in H ₂ O)	System Pressure (in H ₂ O)
Southern Cleanouts Gradient West	LC-01	9/2/2026 1:00:40 PM	7.8	0.4	19.5	72.2	100.0	100.6	-29.75	-28.92	-29.61
Southern Cleanouts Gradient East	LC-02	9/2/2026 1:02:51 PM	5.4	0.2	19.9	74.6	97.9	98.8	-29.90	-29.47	-33.64
Southern Cleanouts Leachate Center	LC-03	9/2/2026 1:06:07 PM	4.9	0.4	19.6	75.1	96.1	99.5	-22.18	-8.73	-28.20
Southern Cleanouts Witness East	LC-04	9/2/2026 1:07:45 PM	1.8	0.0	20.3	78.0	97.1	99.4	-27.07	-27.19	-30.55
Southern Cleanouts Leachate West	LC-05	9/2/2026 12:58:53 PM	8.1	0.5	19.5	71.9	100.0	100.5	-30.05	-30.54	-30.41
Southern Cleanouts Gradient Center West	LC-06	9/2/2026 12:56:36 PM	6.6	0.9	19.9	72.6	99.2	99.2	-29.36	-29.23	-28.83
Southern Cleanouts Leachate East	LC-08	9/2/2026 1:10:00 PM	4.7	0.2	19.7	75.4	97.6	100.7	-28.73	-30.59	-29.40
Southern Cleanouts Gradient Center East	LC-09	9/2/2026 1:11:50 PM	5.3	0.2	19.6	74.9	103.2	103.3	-29.06	-29.61	-31.69
Southern Cleanouts Leachate West	LC-10	9/2/2026 1:13:53 PM	16.6	1.9	17.0	64.5	101.3	102.3	-29.42	-29.28	-30.77
Northern Cleanouts Leachate East	NC-01	9/2/2026 1:22:01 PM	0.4	0.0	20.6	79.0	98.4	98.5	-33.89	-34.43	-33.79
Northern Cleanouts Leachate Center	NC-02	9/2/2026 1:24:06 PM	0.2	0.0	20.9	78.8	96.9	97.2	-33.94	-33.69	-33.77
Northern Cleanouts Leachate West	NC-03	9/2/2026 1:28:31 PM	0.1	0.0	20.8	79.0	98.0	97.8	-34.27	-33.95	-34.19

GAS COLLECTION

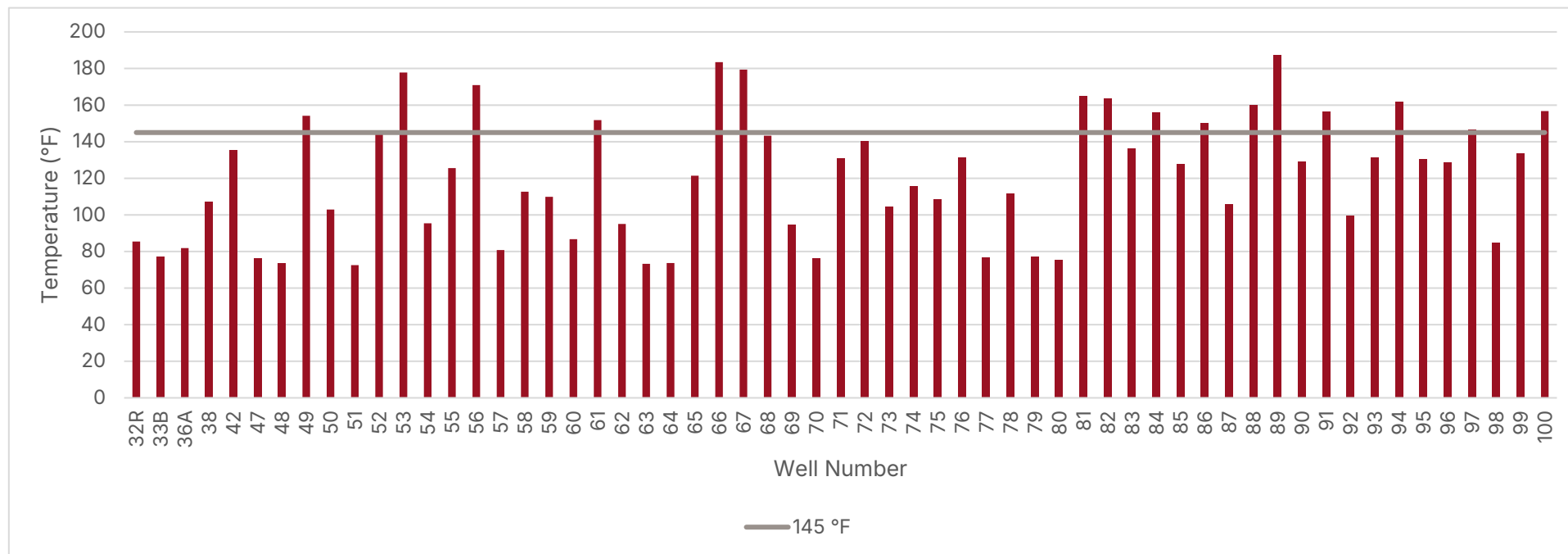
Description	ID#	Record Date	CH ₄ (% by Vol)	CO ₂ (% by Vol)	O ₂ (% by Vol)	Balance Gas (% by Vol)	Initial Temp (°F)	Adj Temp (°F)	Initial Static Pressure (in H ₂ O)	Adj Static Pressure (in H ₂ O)	System Pressure (in H ₂ O)
Northern Cleanouts Witness East	NC-04	9/2/2026 1:30:43 PM	4.1	0.1	20.1	75.7	93.8	93.9	-33.60	-33.24	-34.14
Northern Cleanouts Witness Center	NC-05	9/2/2026 1:32:44 PM	4.2	0.1	20.1	75.7	98.4	98.8	-33.54	-33.53	-33.94
Northern Cleanouts Witness West	NC-06	9/2/2026 1:34:50 PM	0.2	0.0	20.9	79.0	100.9	101.1	-32.59	-32.59	-34.11
Northern Cleanouts Gradient East	NC-07	9/2/2026 1:37:37 PM	0.2	0.1	20.6	79.2	100.6	101.6	-33.64	-33.77	-33.85
Northern Cleanouts Gradient Center East	NC-08	9/2/2026 1:40:11 PM	0.2	0.0	20.7	79.1	102.7	103.3	-34.37	-34.41	-34.20
Northern Cleanouts Gradient Center West	NC-09	9/2/2026 1:42:15 PM	0.3	0.0	20.6	79.2	102.3	102.5	-34.44	-34.31	-34.25
Northern Cleanouts Gradient West	NC-10	9/2/2026 1:44:27 PM	1.1	0.4	20.1	78.4	101.9	103.0	-34.26	-34.41	-34.16

Existing Gas Extraction System Performance

SCS reviewed the automated hourly temperature measurements from September 2026, and observed the following:

The average temperature in September was above the regulatory threshold of 145°F at 16 of the 59 wells (see **Figure 1**).

The highest average temperature was 187.3°F at EW-89.

Figure 1. Monthly Average Automated Wellhead Temperatures¹

COMPARISON WITH MANUAL TEMPERATURE MEASUREMENTS

Per the approval issued by VDEQ on August 2, 2023, the Facility ceased dedicated daily manual temperature measurements in the Permit No. 588 Landfill. In lieu of these measurements, the City compares instantaneous hourly automated temperature measurements with temperatures measured at each wellhead using a handheld sensor during monthly compliance monitoring. These comparisons are shown in Figure 2, with the $\pm 8^{\circ}\text{F}$ deviation thresholds as prescribed in the VDEQ approval.

Temperatures were within the $\pm 8^{\circ}\text{F}$ deviation threshold at all wells except three, EW-47, EW-56, and EW-83, during this reporting period.

At EW-47 and EW-56, the manual and automated temperatures differed by less than 9°F , with the manual temperature reading

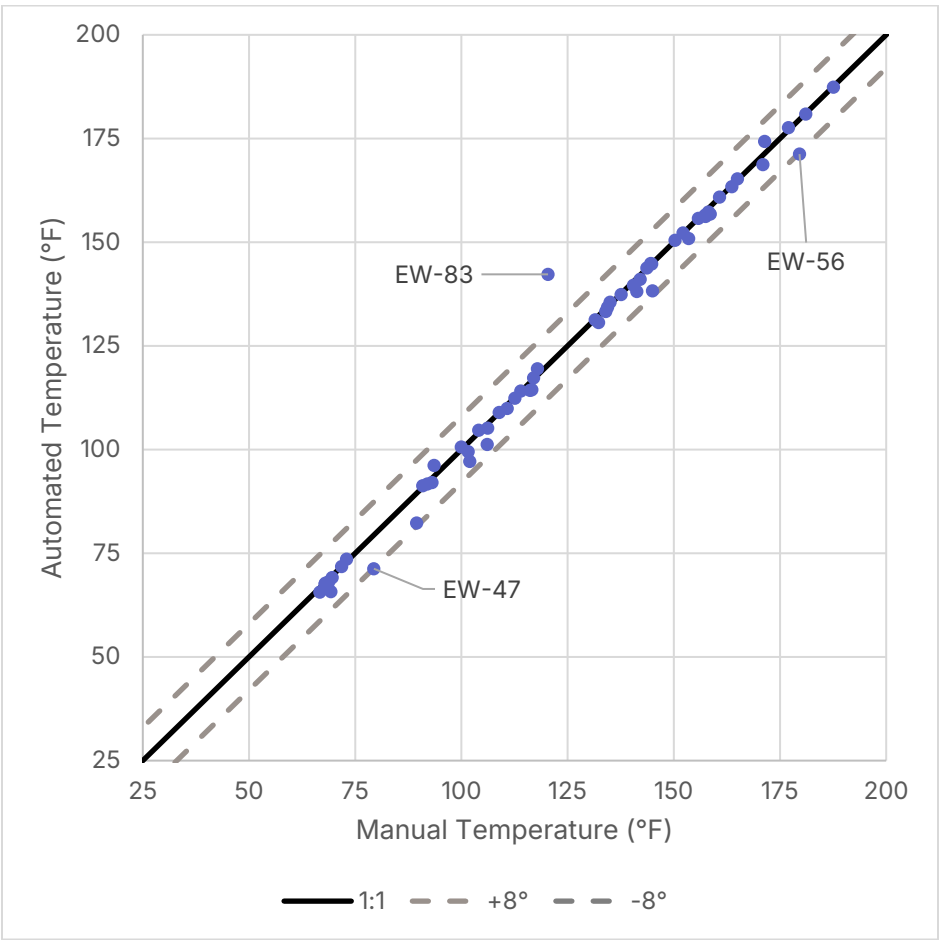
¹ 145°F is the NESHAP AAAA compliance threshold for well temperature, included here for reference.

higher than the automated reading. The automated readings from EW-47 show a warming trend across the hours surrounding the manual reading, and later measurements were within 8°F of the manual temperature reading. The automated readings from EW-56 show a slight dip in temperature at the time closest to the manual reading, with the prior and previous readings both within 8°F of the manual reading.

At EW-83, readings differed by approximately 20°F, with manual readings lower than the automated readings. SCS OM&M inspected and cleaned the automated sensor in EW-83 in the latter half of September.

SCS will continue to review temperature data for these wells and take steps to improve the accuracy of temperature measurement devices if needed.

Figure 2. Automated vs. Manual Temperature Measurements



MONTHLY REGULATORY WELLHEAD TEMPERATURE MEASUREMENTS

Routine monthly temperature monitoring was conducted on September 15 and September 28, 2026, to comply with 40 CFR 60.36f(a)(5). Table 3 provides the status of exceedances recorded during this monitoring period.

GAS COLLECTION

Table 3. August Temperature Exceedance Summary

Well ID	HOV	Initial Exceedance Date	Compliant Reading	Most Recent Reading	Duration of Exceedance	Status as of 10/1/2026
EW-66	190°F	9/1/26	9/23/26 176.9 °F	9/23/26 176.9 °F	23 days	Resolved within 60-day timeline
EW-67	180°F	6/24/26	9/10/26 175.5 °F	9/17/26 174.9 °F	79 days	Resolved beyond 60-day timeline
EW-67	180°F	9/15/26	9/17/26 174.9 °F	9/17/26 174.9 °F	3 days	Resolved within 15-day timeline
EW-68	None	7/29/26	N/A	9/29/26 146.9 °F	65 days	Ongoing, beyond 60-day timeline

LFG SAMPLING

SCS collects weekly LFG samples from wells with temperature exceedances lasting more than seven days using 1.5-L summa canisters. The samples were sent to Onterris (formerly Enthalpy Analytical) for laboratory analysis of carbon monoxide (CO) and hydrogen (H₂) content. As of October 2, 2026, the City has received laboratory data for the sampling on August 24, September 2, September 10, and September 17, 2026, to fulfill the requirement in 40 CFR 63.1961(a)(5). The laboratory data are summarized in Table 4.

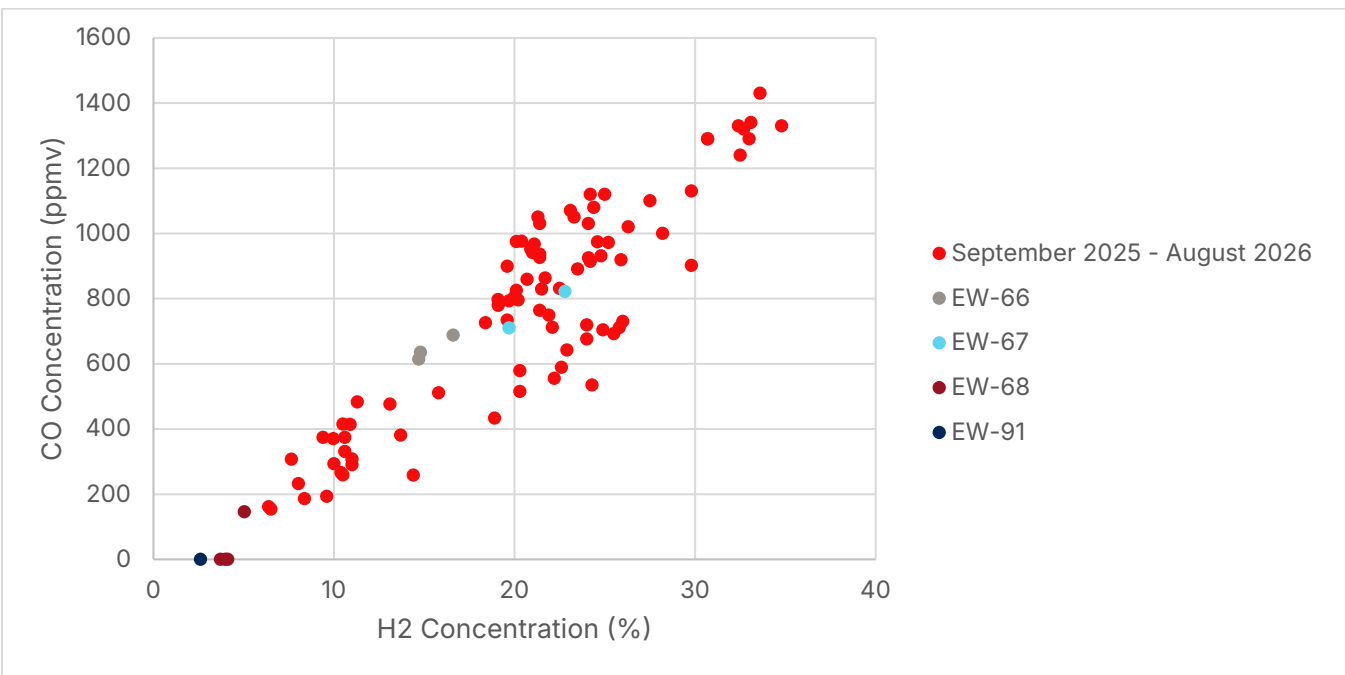
Table 4. LFG Wellhead Sampling Summary

Sample Date		8/24/26	9/2/26	9/10/26	9/17/26
EW-66	CO (ppmv)		635	688	614
	H ₂ (Vol. %)		14.8	16.6	14.7
EW-67	CO (ppmv)	822	710		
	H ₂ (Vol. %)	22.8	19.7		
EW-68	CO (ppmv)	146	ND	ND	ND
	H ₂ (Vol. %)	5.04	3.72	4.12	3.98
EW-91	CO (ppmv)	ND			
	H ₂ (Vol. %)	2.61			

As shown in **Figure 3**, the carbon monoxide and hydrogen data collected during this period are consistent with the data collected previously in 2025 and 2026.

Figure 3. CO vs H₂ Concentration from gas wells in September 2026 with historical trend

SIDEWALL ODOR MITIGATION



2 SIDEWALL ODOR MITIGATION

On the City's behalf, SCS designed and constructed a system to control fugitive emissions emanating from the quarry sidewalls.

Perimeter Gas Collection System

Refer to the April 2023 Monthly Compliance Report for the SWP No. 588 Landfill, for information about the perimeter gas extraction wells.

Sidewall Odor Mitigation System

Refer to the October 2022 Monthly Compliance Report for the SWP No. 588 Landfill, for information about the design of the sidewall odor mitigation system.

Pilot System

Refer to the February 2023 Monthly Compliance Report for the SWP No. 588 Landfill, for information about the design of the construction of the pilot sidewall odor mitigation system.

Full System Operation

Operation of the sidewall odor mitigation system is monitored on a monthly basis. SCS OM&M collected monitoring data at each wellhead under vacuum in September. A summary of system averages during the month is shown in Table 5.

Table 5. Average SOMS Gas Composition

Record Dates	Average CH ₄ [%]	Average CO ₂ [%]	Average O ₂ [%]	Average Bal Gas [%]
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WASTE TEMPERATURE MONITORING

9/9/2026	2.7	3.9	18.2	75.3
9/21/2026	4.3	5.7	16.9	73.2

The average gas composition from the sidewall system indicates lower methane content and higher oxygen and balance gases than other components in the LFGCCS. These gas composition measurements indicate that the SOMS is collecting a mixture of LFG escaping the sidewall and air, as anticipated. Adjustments to vacuum applied to the SOM are made on a regular basis to address changes in sidewall emissions.

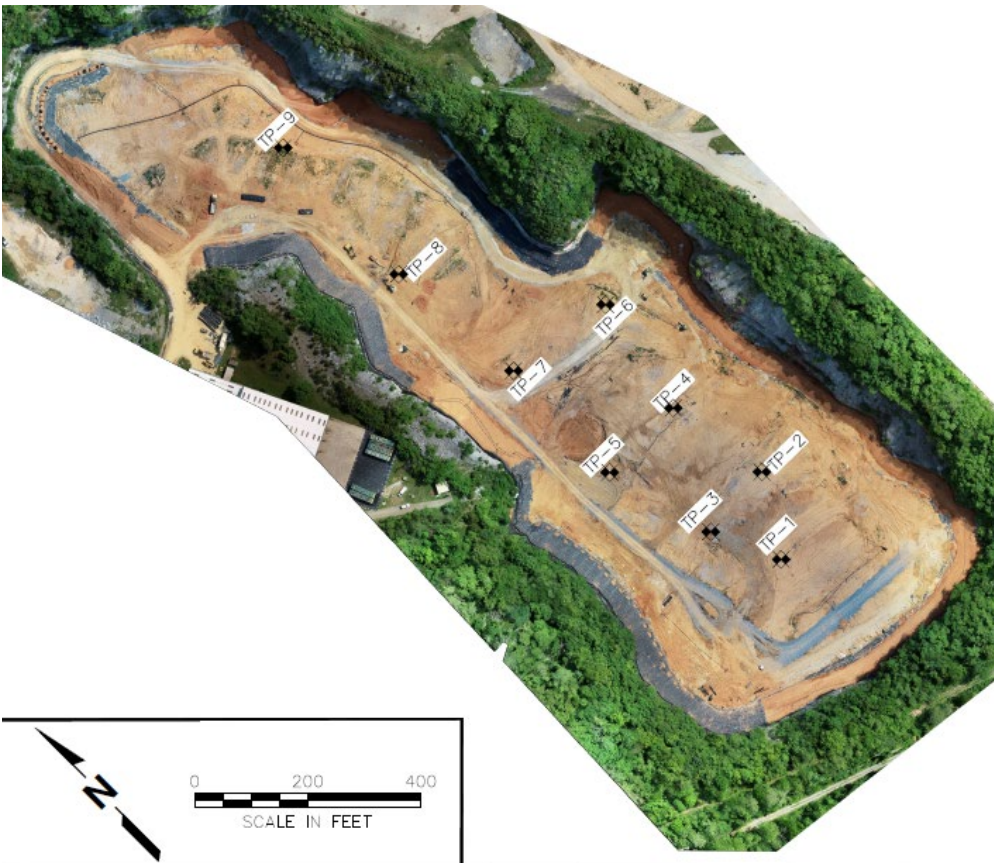
3 WASTE TEMPERATURE MONITORING

SCS designed a monitoring system to collect temperature data throughout the waste mass. The steps taken by the City to implement this system are described in the following sections.

Summary of Waste Temperature Monitoring

Installation of the in-situ Landfill Temperature Monitoring System began in October of 2022 and installation of replacement sensors was completed in February of 2023. Details of construction progress can be found in the monthly compliance reports for the SWP No. 588 Landfill. The locations of the temperature probes are shown in Figure 4.

Figure 4. Temperature Monitoring Probe Locations



SCS began collecting temperature data daily on February 15, 2023.

Average daily temperatures recorded by the sensors for the month of August are included in Appendix D. Each week the average temperatures from a select day of that week are

WASTE TEMPERATURE MONITORING

downloaded and compared to temperatures recorded during the previous week. Average daily temperatures recorded on select days during the month of August are shown in **Appendix B**. The average temperatures recorded for March 2023, March 2024, March 2025, March 2026, July 2026, and August 2026 are shown in **Figures 5 through 9** on the following pages.

Overall, these data indicate that temperatures within the landfill are generally stable and are typical of those observed at elevated temperature landfills (ETLFs). The temperatures recorded are substantially lower than those associated with landfill fires or other combustion processes, which can exceed 1000°F. This is further evidence that the elevated temperatures are due to sources other than combustion.

OPERATIONAL CHALLENGES

Multiple thermocouples in TP-2 and TP-3 started to fault in late 2024 and early 2025. SCS coordinated with the City in March 2026 to pull the string of thermocouples from TP-2 and TP-3 but were unable to remove the strings in either probe due to suspected pinching of the casing. TP-7 has been malfunctioning and offline since December 4, 2025. SCS OM&M relocated equipment that had been part of TP-2 to TP-7 in January, but the sensors at TP-7 still did not function. TP-2, TP-3, and TP-7 have been abandoned. TP-6 started to malfunction mid-July, 2026 and has not yet come back online. The City hosted an invitation to bid for the installation of three replacement probes per the Plan of Action Addendum dated February 2, 2026. The most recent bid closed on August 7, 2026. No bids were received, and another Invitation to Bid is anticipated to be posted in late October.

TEMPERATURE PROFILES

Temperature profiles for the operational thermocouple strings are shown in Figures 5 - 8. Temperature profiles have been consistent throughout 2026, with peak temperatures between 200 and 275°F in TP-1, TP-5, and TP-8 and 150°F in TP-9.

WASTE TEMPERATURE MONITORING

Figure 5. TP-1 Average Temperatures for the Months of March 2023, April 2024, March 2025, March 2026, August 2026, and September 2026

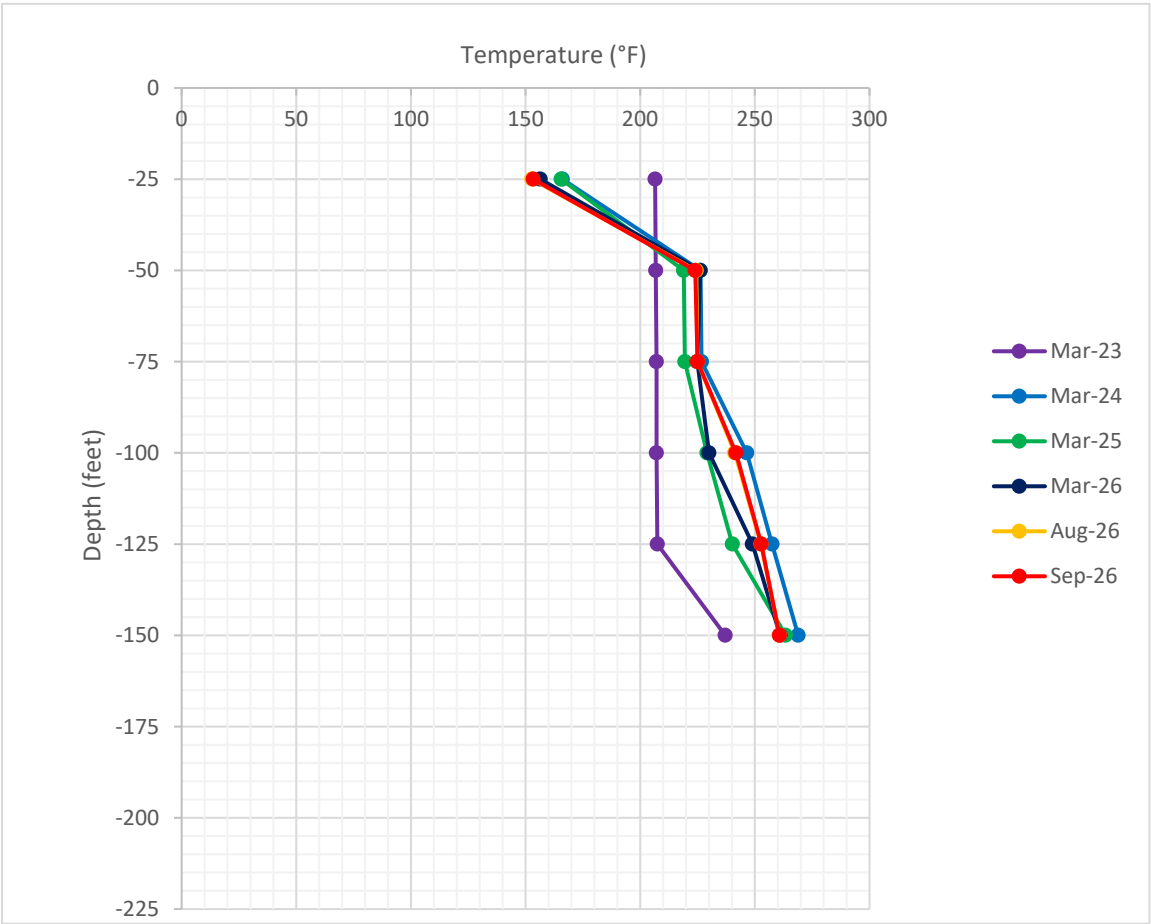
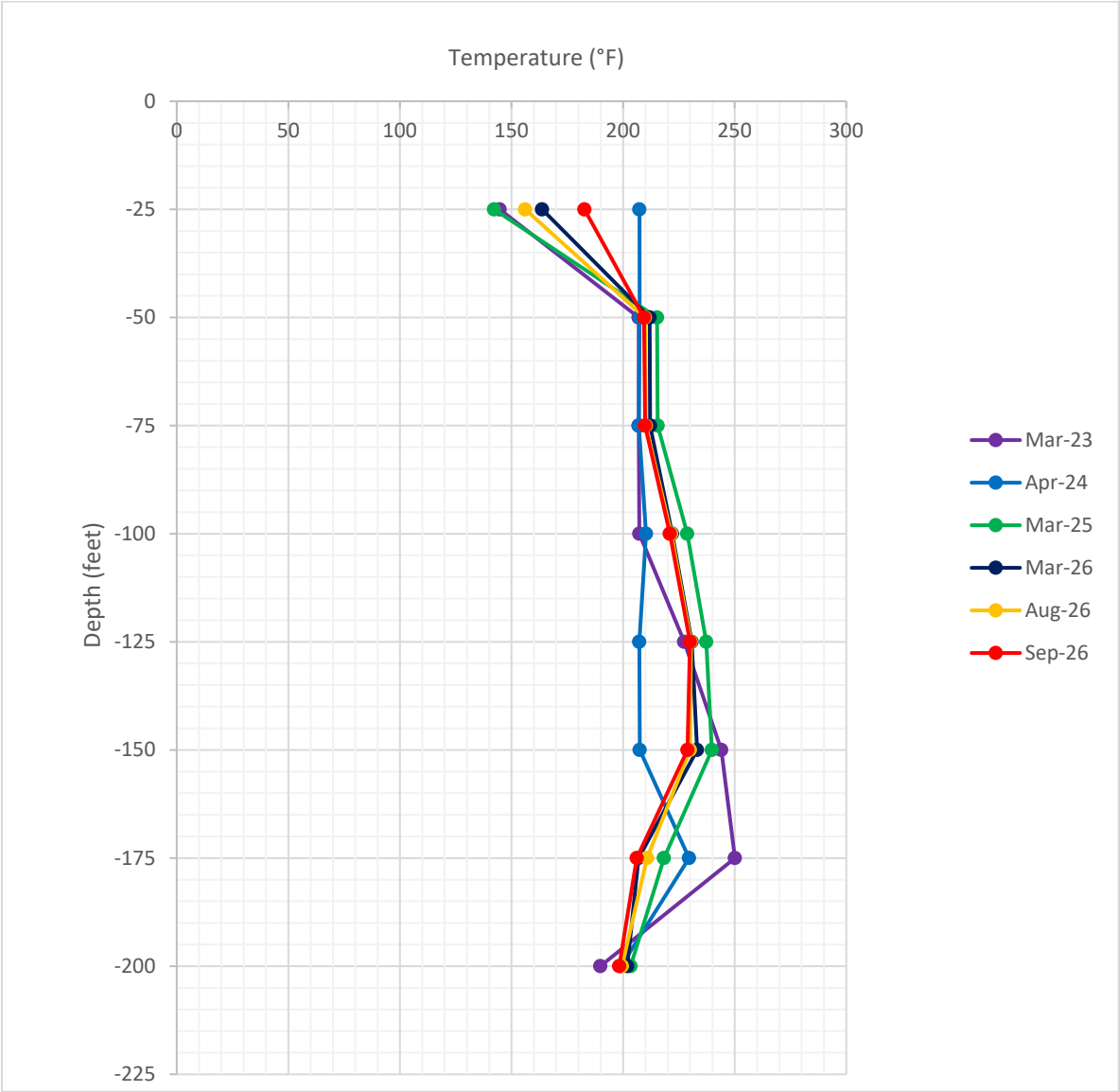


Figure 6. TP-5 Average Temperatures for the Months of March 2023, March 2024, March 2025, March 2026, August 2026, and Septmeber 2026



WASTE TEMPERATURE MONITORING

Figure 7. TP-8 Average Temperatures for the Months of March 2023, March 2024, March 2025, March 2026, August 2026, and September 2026

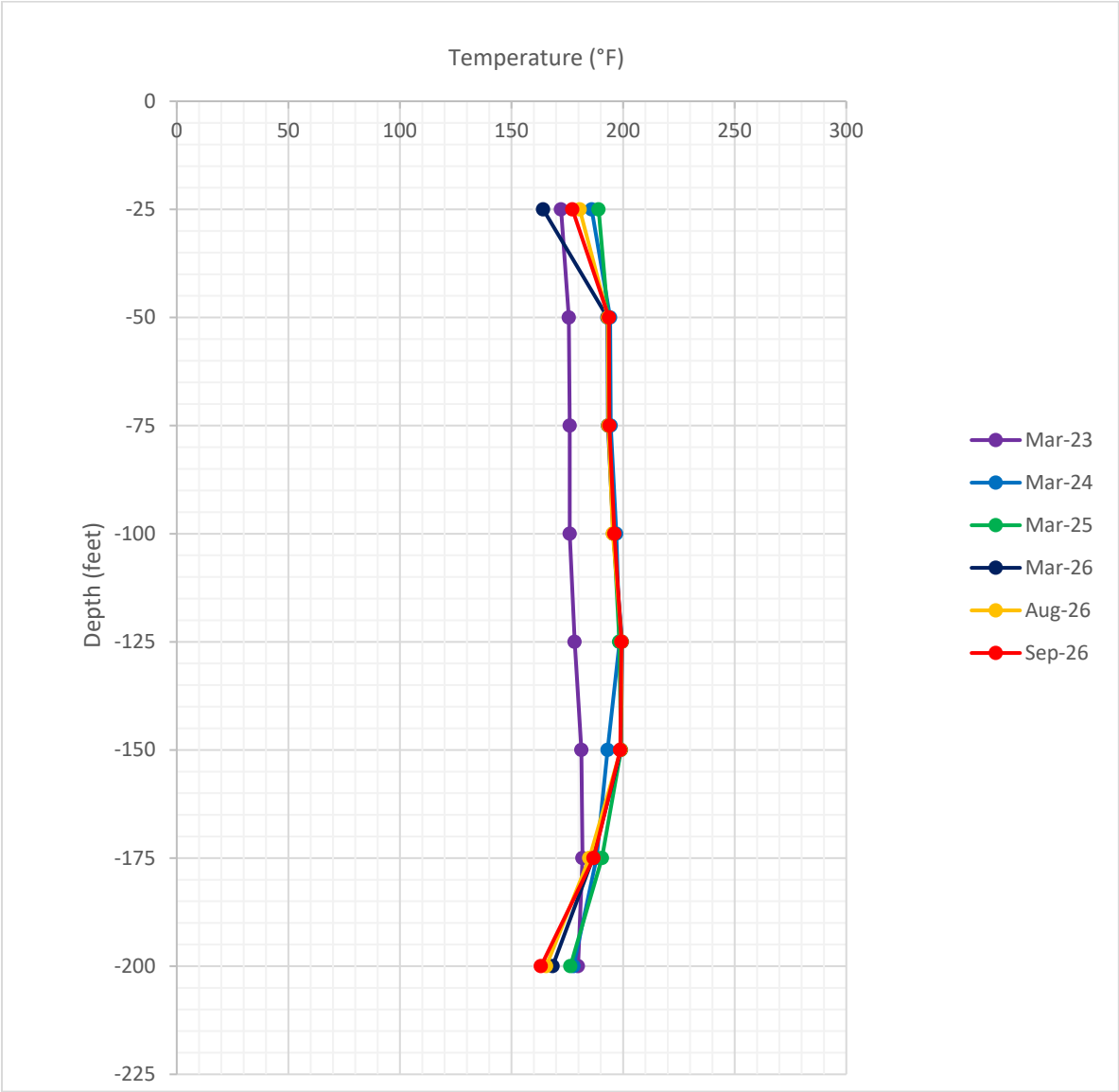
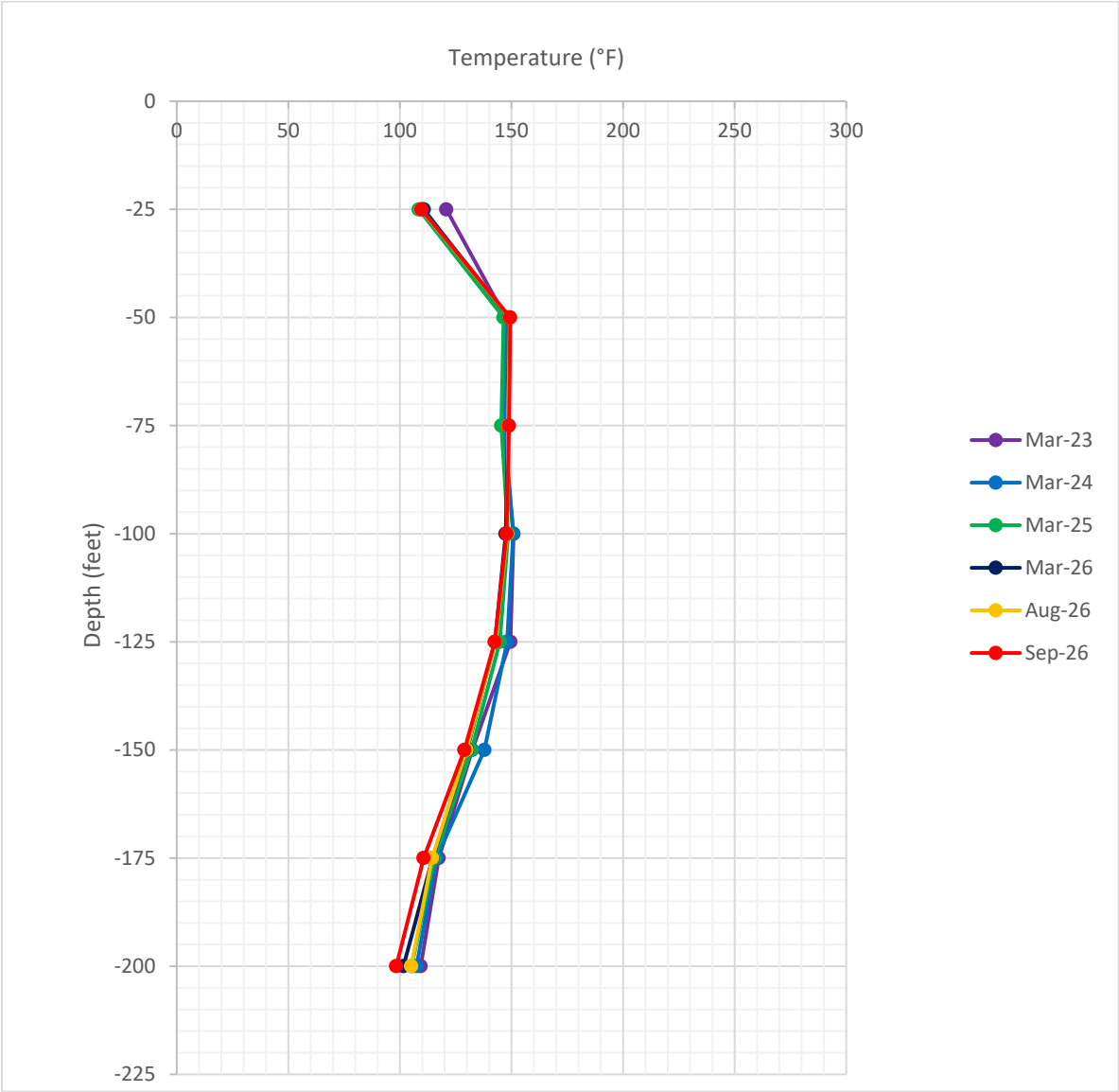


Figure 8. TP-9 Average Temperatures for the Months of March 2023, March 2024, March 2025, March 2026, August 2026, and September 2026



4 LEACHATE EXTRACTION AND MONITORING

The City is continuously taking steps to maintain and improve the extraction of leachate from the waste mass and collect analytical data on leachate characteristics. The following sections detail steps taken to achieve these goals.

Dewatering Pump Operations and Maintenance

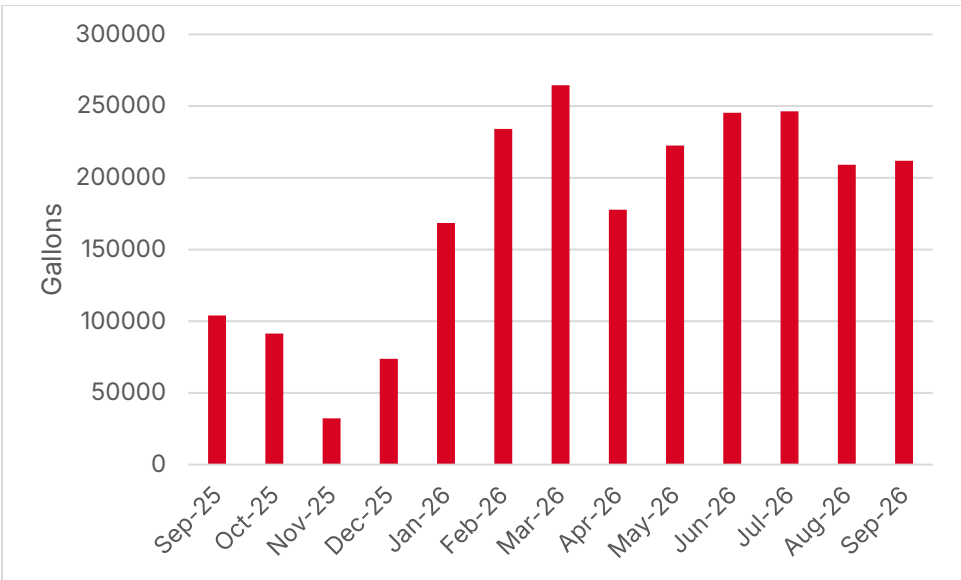
TOTAL LFG LIQUIDS REMOVAL

Figure 9 illustrates monthly extraction well liquids removal over the past year. The volume was estimated from stroke counter data for September 2025 through September 2026. Over the past

LEACHATE EXTRACTION AND MONITORING

6 months, the estimated monthly leachate pumped has ranged from 177,700 to 246,400 gallons per month and has averaged 218,800 gallons per month.

Figure 9. Total Extraction Well Liquids Removal



The Harnden Group began an LFG expansion construction project in September 2025, which necessitated pauses in the operation of dewatering pump infrastructure in December. During construction of the expansion, the City worked with the Harnden Group to replace sections of previously identified blocked forcemain piping as part of the project. Jet cleaning of the clogged leachate lines occurred in March and April, along with replacement of some of the most obstructed lines. Removal of blockages and clogging materials contributed to the increasing liquids removal.

LFG LIQUIDS PUMP OPERATIONS AND MAINTENANCE

The City and SCS understand that operations of dewatering pumps are critical to address issues related to heat, odors, and the efficient operation of the GCCS. The landfill conditions present a challenging environment for pump operations. Daily pump checks and maintenance of spare pumps will continue indefinitely, along with pump replacements as needed.

Estimated volumes of liquids removed at each pump are presented in Table G-1, Appendix G. SCS has prepared the summary below regarding operating conditions and specific challenges associated with each pump in September 2026.

PUMP MAINTENANCE ACTIVITIES

Pulled and swapped pumps in EW-55, EW-67, and EW-98

Stroke counter replaced at EW-54 and EW-66

Pumps removed from EW-49, EW-59, and EW-66, pumps to be reinstalled after forcemain jetting

WELLS WITH INACTIVE PUMPS

The pump in EW-33B is stuck in the well casing and has been disconnected. SCS OM&M plans to replace the pump with a new QED pump.

SCS OM&M intends to place a QED pump in EW-36A, in place of the Blackhawk pump that has proved ineffective.

All pump types deployed in EW-74 and EW-75 have experienced buildup on the intake screens preventing effective pump operation. To conserve resources for pumping in other wells, pumps are no longer being deployed in these wells.

The casings of EW-81, EW-83, and EW-91 extend too high above the existing ground level for a pump to be safely accessed. These are stainless steel wells that cannot be lowered through conventional means, both due to the fusion methods required and a shorter solid section before perforation begins. SCS OM&M and the City are continuing placement of additional soil around the wells to provide safe access.

The pump in EW-93 has been removed due to clogging of the tri tubing and forcemain tee. The City and SCS OM&M are exploring additional forcemain pipe cleaning options to alleviate the buildup.

In addition to the challenges associated with the individual pumps, SCS OM&M has generally observed high forcemain pressures and significant build-up of solids within the forcemain. SCS OM&M and the City are coordinating a jetting event in September 2026, with plans to reduce scaling with chemical solutions after.

Sampling and Analysis Plan

In accordance with the second amendment to the consent decree dated January 16, 2026, the frequency of landfill gas liquids sampling has been reduced to quarterly. Sampling and analysis of landfill gas liquids was conducted in July 2026 for the Third Quarter 2026 monitoring event. Refer to the July 2026 Monthly Compliance Report for the SWP No. 588 Landfill, for results of the Third Quarter 2026 monitoring event.

5 SETTLEMENT MONITORING AND MANAGEMENT

The City is taking steps to track and manage settlement occurring in the landfill. A summary of actions taken to quantify and manage settlement is included in the sections below.

Settlement Monitoring and Management Plan

Information about the Settlement Monitoring and Management Plan for the SWP No. 588 Landfill and a copy of the plan can be found in the November 2022 Compliance Report for the SWP No. 588 Landfill.

Monthly Surveys

TOPOGRAPHIC DATA COLLECTION

SCS collected topographic data of the Solid Waste Permit No. 588 Landfill using photogrammetric methods via an unmanned aerial vehicle (UAV or drone) on September 1, 2026. Aerial imagery collected on September 1, 2026, is depicted in **Figure 10**. The topographic data collected is shown on Sheet 4 in **Appendix E**.

Figure 10. Aerial Photo of the SWP No. 588 Landfill



The topography within the landfill footprint was compared to topographic data collected by SCS using photogrammetric methods on August 7, 2026. A drawing depicting the August 7, 2026, topography is included as Sheet 3 in **Appendix E**.

Based on a comparison of the topographic data collected on those two dates, the data shows a fill of 2,400 cubic yards across the site. Fill is placed and spread on the site to address differential settlement, surface emissions, and to provide access to LFG collection vertical wells. Fill was also placed in the northern end of the landfill as part of the installation of a new landfill gas header in that part of the landfill.

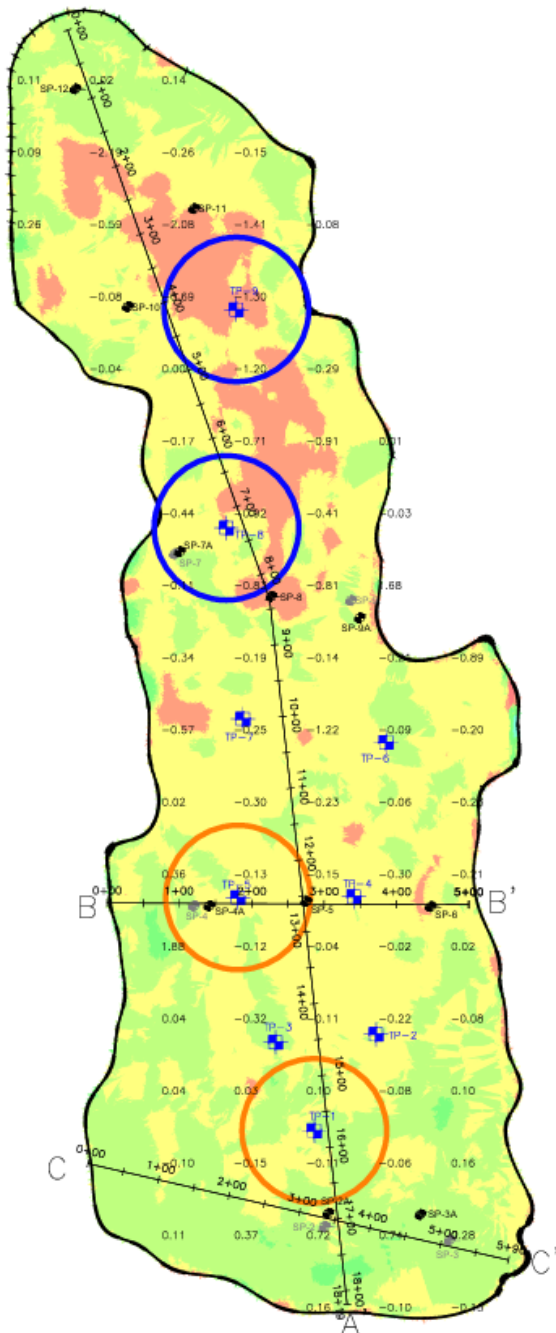
Vegetation growth, which occurs during the spring and summer months may be misinterpreted as fill by the photogrammetric survey methods. In some cases, the top of vegetation is measured using this survey method rather than the ground surface. Some of the atypical fill volume shown by the August 7, 2026 data may be attributable to vegetation growth along the sidewall. As shown in Figure 10, these vegetated areas correspond to some of the most extreme apparent fill locations and can result in inflated cut volumes vegetation is removed. An example of vegetation growth on the sidewalls is shown in a photo in **Figure 11**.

Figure 11. Vegetation Growth on Quarry Sidewalls



During that same time period, calculations indicate a “cut” volume of approximately 8,600 cubic yards. Cut volumes are typically attributed to settlement. This resulted in a net decrease in volume within the waste footprint of 6,200 cubic yards.

A visual depiction of settlement and filling at the landfill during this time is depicted in **Figure 12**. Areas in yellow and orange indicate where elevations decreased and areas in green indicate where elevations have increased. Darker colors indicate greater changes in elevation. This drawing is also included as Sheet 5 in **Appendix E**. The increased settlement shown in the northern part of the landfill is likely the result of recent clearing of vegetation.

Figure 12. 1-Month Elevation Change Map

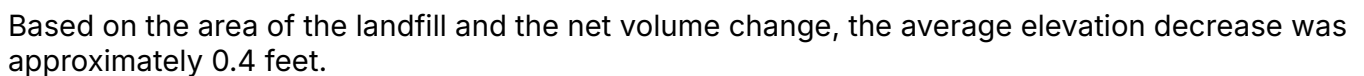
The locations of in-waste temperature monitoring probes are also shown on **Figure 12**, **Figure 13**, and **Figure 14**. The circles around the probes in each of these figures are indicative of the average borehole temperature. The circles shown are offset from the probes for clarity only and do not necessarily indicate temperatures measured at locations away from the probe. Probes with a blue circle around them typically have an average temperature less than 200°F across the full depth of the probe. Probes with an orange circle around them typically have an average temperature greater than 200°F and less than 250°F across the full depth of the probe. Probes with no circle around them had no temperature readings for this month due to sensor malfunctions. There were no probes measuring average temperatures greater than 250°F during the month of August 2026.

SETTLEMENT MONITORING AND MANAGEMENT

SCS calculated the waste footprint for purposes of analysis to be 752,610 square feet. Based on that area and the net volume change, the average elevation decrease between the flyover dates was 0.2 ft.

SCS also compared the topographic data collected in September to the topographic data collected on June 17, 2026. Based on a comparison of the topographic data collected on those two dates, settlement occurred that reduced the volume of waste in the landfill by approximately 16,100 cubic yards. During that same period, calculations indicate approximately 3,400 cubic yards of fill were placed on the landfill, for a net decrease in waste volume of 12,700 cubic yards.

A visual depiction of settlement and filling at the landfill during this time is depicted in **Figure 13**. Areas in orange and yellow indicate where elevations decreased and areas in green indicate where elevations have increased. Darker colors indicate greater changes in elevation. This drawing is also included as Sheet 6 in **Appendix E**.

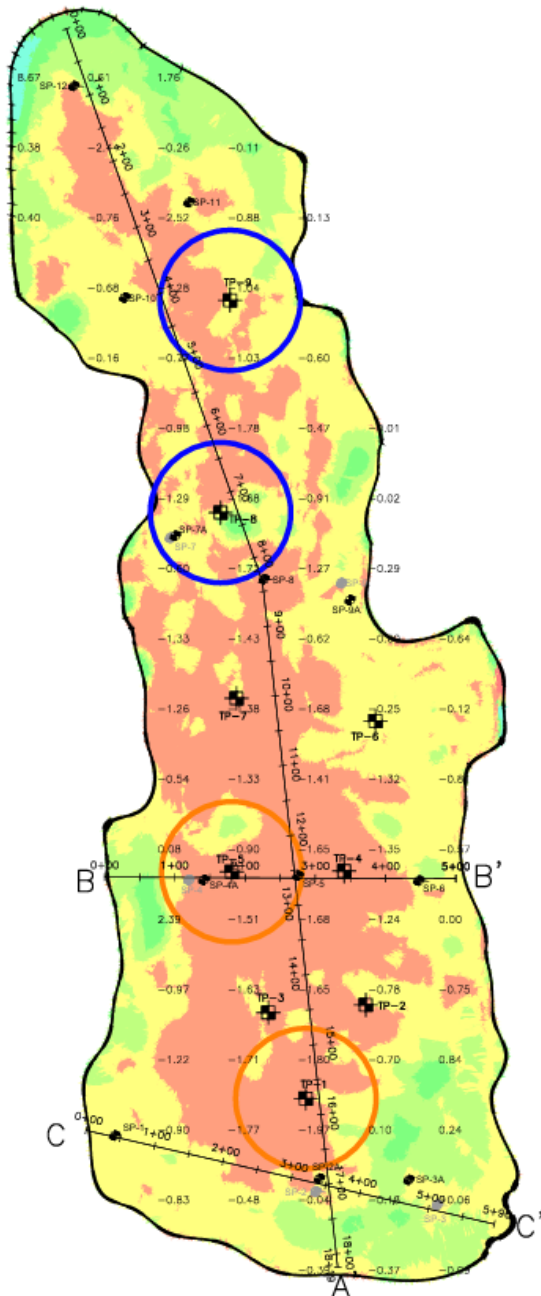


SCS also compared the topographic data collected in September 2026 to the drone topographic data collected on September 11, 2025. Based on a comparison of the topographic data collected on those two dates, settlement occurred that reduced the volume of waste in the landfill by approximately 23,500 cubic yards. During that same time period approximately 3,500 cubic yards of construction-related fill were placed on the landfill. This resulted in a net volume decrease of approximately 20,000 cubic yards.

SETTLEMENT MONITORING AND MANAGEMENT

A visual depiction of settlement and filling at the landfill during this time is depicted in **Figure 14**. Areas in yellow and orange indicate where elevations decreased and areas in green and blue indicate where elevations have increased. Darker colors indicate greater changes in elevation. This drawing is also included as Sheet 7 in **Appendix E**.

Figure 14. 1-Year Elevation Change Map



The largest settlement in the past year typically occurs primarily at the southern end of the landfill where the waste settled by two feet or more in some areas. Significant settlements are typical of elevated temperature landfill conditions. Portions the landfill perimeter exhibited an increase in elevation, likely due to soil placement associated with construction and/or ongoing maintenance of the Sidewall Odor Mitigation System. There were variations in elevation associated with soil stockpiling operations.

SETTLEMENT MONITORING AND MANAGEMENT

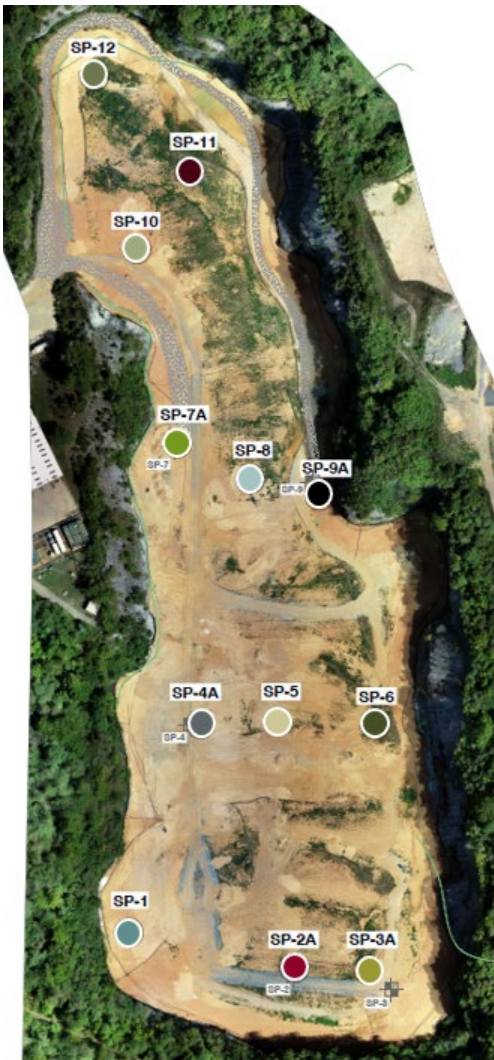
Based on the landfill area and the net volume change, the average elevation decrease in the past year was approximately 0.7 feet.

SCS will collect topographic data covering the landfill surface again in October 2026 using photogrammetric methods via UAV. This data will be compared to the data collected in October 2025, July 2026, and September 2026.

SETTLEMENT PLATE SURVEYS

On November 7, 2022, SCS field services installed 12 settlement plates on the Solid Waste Permit No. 588 landfill. Five new settlement plates (SP-2A, SP-3A, SP-4A, SP-7A, and SP-9A) installed during June 2024 are intended to replace non-operational settlement plates. The settlement plate locations are depicted in **Figure 15** and on Sheet 1 in **Appendix E**. The construction and installation of the settlement plates generally conform to the description in the Settlement Monitoring and Management Plan.

Figure 15. Settlement Plate Locations



SETTLEMENT MONITORING AND MANAGEMENT

The locations of the settlement plates were initially surveyed on November 14, 2022, and have been surveyed monthly thereafter. The survey coordinates and elevation changes of the settlement plates are shown in **Table 6**.

Table 6. Elevation and Strain Data at Settlement Plate Locations

Settlement Plate	Northing	Easting	Elevation on September 9, 2026 (ft)	Elevation Change Since August 5, 2026 (ft)	Strain ² Since August 5, 2026	Elevation Change Since Installation (ft)
SP-1	3397887.7	10412081.3	1827.9	0.0	0.0%	-6.5
SP-2A	3397823.7	10412370.8	1790.2	-0.1	-0.1%	-5.5
SP-3A	3397820.3	10412498.0	1778.2	0.0	0.0%	-2.0
SP-4A	3398247.0	10412208.4	1800.4	-0.2	-0.1%	-4.7
SP-5	3398255.8	10412339.8	1785.6	-0.3	-0.1%	-15.2
SP-6	3398248.8	10412509.9	1771.8	-0.1	-0.1%	-5.9
SP-7A	--	--	--	--	--	--
SP-8	3398677.9	10412290.9	1798.2	-0.1	-0.1%	-9.1
SP-9A	3398644.1	10412415.9	1787.7	0.1	0.1%	-1.1
SP-10	3399079.6	10412095.5	1835.2	0.0	0.0%	-4.3
SP-11	3399216.5	10412183.9	1813.8	0.0	0.0%	-2.5
SP-12	3399381.7	10412019.6	1809.1	-0.1	-0.1%	-1.5

As of July 2025, the settlement plate elevations are measured by Miller Land Surveying LLC.

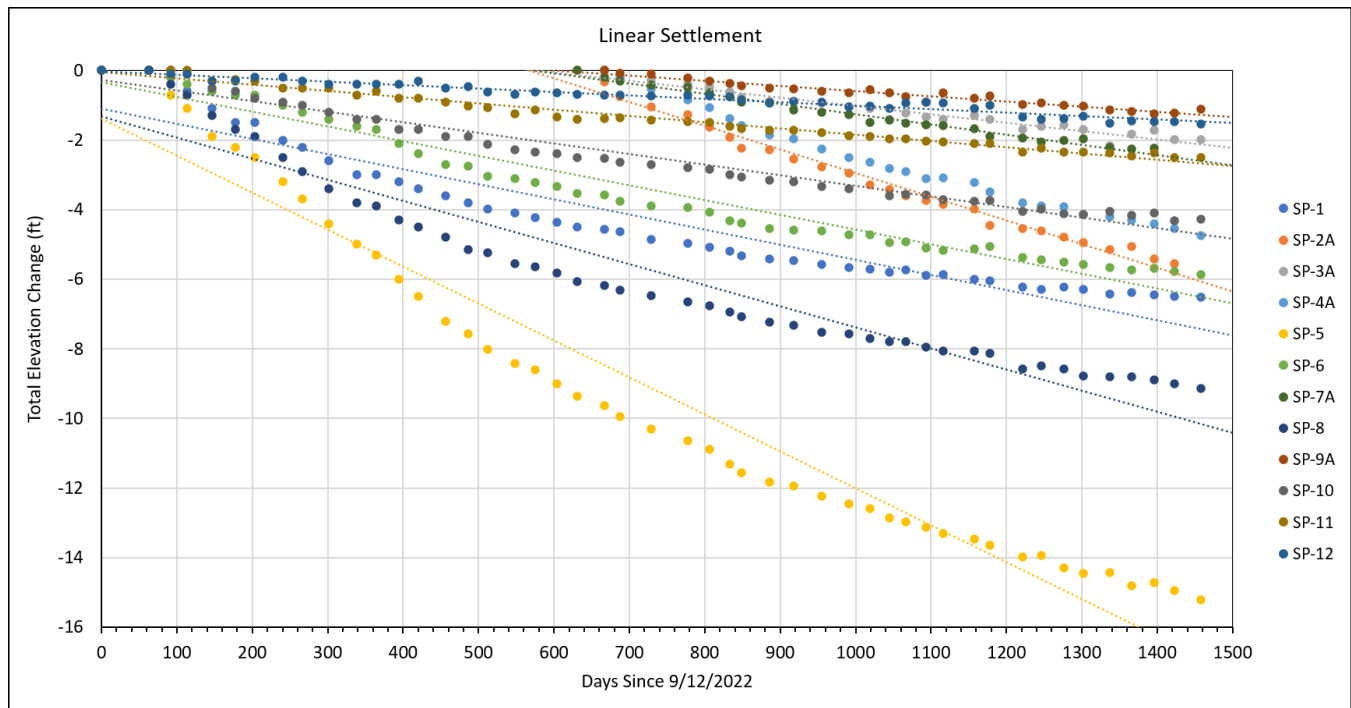
Settlement Plates 4A and 5 demonstrated the largest amount of settlement strain. These plates are located in the mid-southern end of the landfill. The southern area of the landfill is the location of the gas wells and temperature probes exhibiting higher temperatures.

Settlement Plate 7A was excluded from the data this month, as the measurement was taken at abandoned SP-7 instead of SP-7A. To keep the data consistent, the elevation will be correctly measured in October along with the rest of the settlement plates.

Figure 16 shows the changes in elevation of select settlement plates over time. The data in **Figure 16** are reported in days since the landfill was required to stop accepting waste.

² Strain is defined as the change in elevation divided by the estimated waste depth.

Figure 16. Elevation Change of Select Settlement Plates Over Time



The settlement plates will be surveyed again during October 2026. The elevations surveyed will be compared to the elevations surveyed the previous months.

6 INTERMEDIATE COVER AND GEOMEMBRANE COVER SYSTEM

The City has taken steps to provide intermediate and temporary cover of the wastes in the landfill. The sections below describe the steps taken by the City and future plans related to cover.

Intermediate Cover Installation

A summary of the intermediate cover installation can be found in the October 2022 Monthly Compliance Report for the SWP No. 588 Landfill.

Geomembrane Cover System Design

A second amendment to the Consent Decree was issued on January 16, 2026 which requires a geomembrane deployment once the criteria outlined in the consent decree are achieved. The amended Consent Decree also requires regular settlement assessments that will analyze settlement to evaluate if the criteria have been met. The first settlement assessment was submitted to VDEQ on April 11, 2024. The most recent assessment was submitted on July 14, 2026. The next assessment will be submitted on or before January 15, 2027.

Geomembrane Cover System Procurement

Information about the procurement of materials for the geomembrane cover system can be found in the January 2023 Monthly Compliance Report for the SWP No. 588 Landfill.

Geomembrane Cover System Installation

As outlined in the second amendment to the Consent Decree dated January 16, 2026, the deadline for geomembrane cover system installation has been extended until such time as the criteria outline in the consent decree have been met. The City is conducting the assessments described in Section 6.2 to determine the appropriate time for installation.

7 STORMWATER MANAGEMENT

Information about the most recent stormwater management plans, basin location, plan implementation, long-term control, and stormwater monitoring for the SWP No. 588 Landfill can be found in the December 2023 Monthly Compliance Report for the SWP No. 588 Landfill.

8 MISCELLANEOUS

Cease Waste Acceptance

The City ceased acceptance of offsite waste at the Solid Waste Permit No. 588 landfill prior to September 12, 2022.

Long-Term Plan

Refer to the December 2022 and March 2023 Monthly Compliance Reports for the SWP No. 588 Landfill for additional information about the development and implementation of the Monitoring, Maintenance, and Repair Plan.

Monthly Compliance Reports

As described in the introduction, this report is intended to provide comprehensive updates regarding progress towards completion of each item described in Appendix A of the Consent Decree between the City and VDEQ.

Community Outreach Program

The City's consultant leading community outreach, McGuireWoods Consulting, prepared a summary of the actions taken as part of their community outreach efforts. For the month of September 2026, those actions include:

- Ongoing basis: Four (4) posts on each the BristolVALandfill.org site and the existing City of Bristol Landfill Notifications and Information page covering important updates including:
 - o Progress updates related to remediation efforts and normal maintenance activities at the Landfill.

MISCELLANEOUS

- Updates at the Landfill this month included performing maintenance on the gas, leachate, and condensate extraction piping to improve efficiency; removing and replacing a faulty leachate pump; cleaning reserve leachate pumps; cleaning and repairing gas extraction wells; and adding soil to areas that have been affected by settlement issues.
- Weekly updates on landing page on Bristolvalandfill.org titled "Air Sampling and Air Monitoring" that includes a summary of the air sampling and monitoring being conducted by Bristol, VA around the quarry landfill.
 - Website now includes weekly air monitoring reports starting from May 15, 2023, and running through August 30, 2026.
- E-mail communication sent to the list of members of the public signed up through the Bristol, VA website, the BristolVALandfill.org website, or at subsequent Open Houses to receive information via e-mail
 - E-mails sent included weekly remediation progress update and links to website updates and latest news articles.

APPENDIX A

SURFACE EMISSIONS MONITORING SUMMARY

Quarterly SEM

SCS performed the Third Quarter 2026 surface emissions monitoring event on August 26, 2026. The surface emissions monitoring route included the entire waste footprint of the Permit No. 588 landfill. Sampling was conducted with Elkins Earthworks IRwin ProSEM at 30-meter intervals and where visual observations indicated the potential for elevated concentrations of LFG, such as distressed vegetation and surface cover cracks. In addition, in accordance with 40 CFR 63.1958(d)(ii)(2) and 40 CFR 60.34f(d), monitoring was conducted at all surface cover penetrations within the waste footprint.

No exceedances were detected during this quarterly monitoring event on the serpentine route or at the surface cover penetrations. This monitoring event also represented the weekly monitoring event for the week. A quarterly SEM report will be submitted to the VDEQ as part of the Semi-Annual Report. In addition, monitoring results were presented to the VDEQ in a letter dated September 2, 2026.

Weekly SEM

In addition to the standard regulatory quarterly surface emissions monitoring, the monitoring in September generally conformed to the requirements of 40 CFR 63.1960(c) and (d), and 40 CFR 60.36f(c) and (d), and 40 CFR 60, Appendix A, Method 21. The landfill gas (LFG) collection system is required to operate such that the methane concentration is less than 500 ppm above background at the landfill surface.

The SEM route included the waste footprint of the Permit No. 588 landfill. Sampling was conducted with a Elkins Earthworks IRwin ProSEM at 30-meter intervals and where visual observations indicated the potential for elevated concentrations of LFG, such as distressed vegetation and surface cover cracks. In addition, in accordance with 40 CFR 63.1958(d)(ii)(2) and 40 CFR 60.34f(d), monitoring was conducted at applicable surface cover penetrations within the waste footprint.

The Facility submitted letters to VDEQ describing the results of the September monitoring events on September 9, 2026; September 16, 2026; September 23, 2026; and, September 30, 2026. Copies of those letters are included in this Appendix.

The Facility continues to take proactive steps to limit fugitive surface emissions including dewatering activities, additional cover soil placement, and LFG system maintenance and tuning to increase gas extraction.



15521 Midlothian Turnpike
Suite 305
Midlothian, VA 23113
804-378-7440
File No. 02218208.04

September 9, 2026

Ms. Susan "Tracey" Blalock
Air Compliance Specialist
Virginia Department of Environmental Quality
Southwest Regional Office
355-A Deadmore Street
Abingdon, VA 24210

Subject: Weekly Surface Emissions Monitoring Event – September 4, 2026
Bristol Integrated Solid Waste Management Facility – Bristol, Virginia

Dear Ms. Blalock:

On behalf of the City of Bristol (City), SCS Engineers (SCS) is pleased to submit the results of the Weekly Surface Emissions Monitoring event performed at the Bristol Integrated Solid Waste Management Facility located in Bristol, Virginia on September 4, 2026. This Weekly Surface Emissions Monitoring (SEM) Event was performed in accordance with Appendix A.1.i of the Consent Decree between the Commonwealth of Virginia and the City of Bristol.

The monitoring generally conforms to the requirements of 40 CFR 63.1960(c) and (d), and 40 CFR 60.36f(c) and (d), and 40 CFR 60, Appendix A, Method 21. The landfill gas (LFG) collection system is required to operate such that the methane concentration is less than 500 ppm above background at the landfill surface.

The monitoring route includes the entire waste footprint of Permit No. 588 Landfill. Sampling was conducted with a Thermo Scientific TVA-2020 Flame Ionization Detector at 30-meter intervals and where visual observations indicated the potential for elevated concentrations of LFG, such as distressed vegetation and surface cover cracks. In addition, in accordance with 40 CFR 63.1958(d)(ii)(2) and 40 CFR 60.34f(d), monitoring was conducted at all surface cover penetrations within the waste footprint, including at the temperature probes and horizontal collectors. The approximate monitoring route and sampling locations are presented in the attached Drawing.

At the time of monitoring, all areas of the Permit No. 588 Landfill footprint are subject to regulatory monitoring based on the regulatory schedule stipulated in 40 CFR 63.1960(b) and 40 CFR 60.36f(b). Permit No. 588 Landfill has a surface area of approximately 17.3 acres. Therefore, the minimum number of sampling points to cover the appropriate portion of the landfill footprint, utilizing a 30-meter grid interval, is approximately 82 (4.75 points per acre). A summary of the results of the surface emissions monitoring is provided in Table 1.

Table 1. Summary of Surface Emissions Monitoring

Description	Quantity
Number of Points Sampled	168
Number of Points in Serpentine Route	100
Number of Points at Surface Cover Penetrations	68
Number of Exceedances	0
Number of Serpentine Exceedances	0
Number of Pipe Penetration Exceedances	0

REMONITORING OF ONGOING EXCEEDANCES

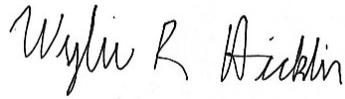
In accordance with 40 CFR 63.1960(c)(4)(ii) and 40 CFR 60.36f(c)(4)(ii), corrective actions and a remonitoring event are to be performed within 10 days of the initial exceedance. In accordance with 40 CFR 63.1960(c)(4)(iii) and 40 CFR 60.36f(c)(4)(iii) additional corrective actions and a second 10-day retest are to be performed if the initial 10-day retest indicates methane values greater than the regulatory threshold. The Facility performs corrective actions, as necessary, including wellhead vacuum adjustments, the installation of well-bore seals, and addition of soil cover prior to weekly monitoring events at locations that previously exhibited elevated methane concentrations.

In accordance with 40 CFR 63.1960(c)(4)(v) and 40 CFR 60.36f(c)(4)(v) a new well or collection device must be installed or an alternate remedy must be submitted within 120 days at locations that continue to exhibit methane concentrations above the regulatory threshold for two consecutive re-tests.

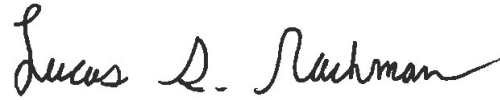
There are currently no ongoing exceedances.

If you have any questions or require additional information, please contact either of the undersigned.

Sincerely,



Wylie R Hicklin
Staff Professional
SCS Engineers
123-456-7890
WHicklin@scsengineers.com



Lucas S. Nachman
Senior Project Professional
SCS Engineers
804-840-5325
LNachman@scsengineers.com

Enclosure(s): Surface Emissions Monitoring Results
Bristol SEM Route Drawing

CC: Laura Helander, City of Bristol
Jon Hayes, City of Bristol
Logan Culhane, SCS Field Services

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - SEPTEMBER 4, 2026
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates		Comments
			Lat.	Long.	
1	30.6 PPM	OK			Start Serpentine Route
2	3.5 PPM	OK			
3	4.5 PPM	OK			
4	3.0 PPM	OK			
5	2.3 PPM	OK			
6	2.2 PPM	OK			
7	2.2 PPM	OK			
8	2.0 PPM	OK			
9	2.0 PPM	OK			
10	2.8 PPM	OK			
11	2.5 PPM	OK			
12	2.5 PPM	OK			
13	36.0 PPM	OK			
14	9.7 PPM	OK			
15	10.1 PPM	OK			
16	7.6 PPM	OK			
17	4.0 PPM	OK			
18	11.0 PPM	OK			
19	10.7 PPM	OK			
20	2.0 PPM	OK			
21	1.9 PPM	OK			
22	13.8 PPM	OK			
23	5.2 PPM	OK			
24	6.7 PPM	OK			
25	4.2 PPM	OK			
26	4.0 PPM	OK			
27	21.5 PPM	OK			
28	29.4 PPM	OK			
29	42.7 PPM	OK			
30	206.0 PPM	OK			
31	2.3 PPM	OK			
32	2.4 PPM	OK			
33	2.1 PPM	OK			
34	1.9 PPM	OK			
35	2.1 PPM	OK			
36	8.1 PPM	OK			
37	111.0 PPM	OK			
38	1.6 PPM	OK			
39	1.5 PPM	OK			
40	1.5 PPM	OK			
41	1.6 PPM	OK			
42	1.7 PPM	OK			
43	1.6 PPM	OK			
44	2.9 PPM	OK			
45	2.3 PPM	OK			
46	2.2 PPM	OK			
47	2.0 PPM	OK			
48	3.2 PPM	OK			

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - SEPTEMBER 4, 2026
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates		Comments
			Lat.	Long.	
49	1.7 PPM	OK			
50	1.3 PPM	OK			
51	1.7 PPM	OK			
52	1.4 PPM	OK			
53	4.9 PPM	OK			
54	3.9 PPM	OK			
55	10.0 PPM	OK			
56	4.0 PPM	OK			
57	9.8 PPM	OK			
58	300.0 PPM	OK			
59	52.0 PPM	OK			
60	7.2 PPM	OK			
61	4.1 PPM	OK			
62	4.5 PPM	OK			
63	10.6 PPM	OK			
64	4.5 PPM	OK			
65	7.2 PPM	OK			
66	1.5 PPM	OK			
67	5.6 PPM	OK			
68	14.5 PPM	OK			
69	1.7 PPM	OK			
70	1.2 PPM	OK			
71	5.3 PPM	OK			
72	2.9 PPM	OK			
73	1.2 PPM	OK			
74	1.3 PPM	OK			
75	1.3 PPM	OK			
76	1.6 PPM	OK			
77	4.4 PPM	OK			
78	1.6 PPM	OK			
79	1.4 PPM	OK			
80	1.4 PPM	OK			
81	1.4 PPM	OK			
82	1.2 PPM	OK			
83	1.2 PPM	OK			
84	1.3 PPM	OK			
85	4.3 PPM	OK			
86	5.4 PPM	OK			
87	2.3 PPM	OK			
88	2.3 PPM	OK			
89	2.2 PPM	OK			
90	2.5 PPM	OK			
91	7.7 PPM	OK			
92	3.6 PPM	OK			
93	2.7 PPM	OK			
94	8.4 PPM	OK			
95	0.9 PPM	OK			
96	0.9 PPM	OK			

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - SEPTEMBER 4, 2026
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates		Comments
			Lat.	Long.	
97	0.9 PPM	OK			
98	9.1 PPM	OK			
99	0.9 PPM	OK			
100	0.8 PPM	OK			End Serpentine Route
101	33.7 PPM	OK			EW-52
102	0.9 PPM	OK			TP-4
103	2.7 PPM	OK			EW-60
104	2.1 PPM	OK			EW-48
105	7.7 PPM	OK			TP-6
106	5.5 PPM	OK			EW-61
107	1.0 PPM	OK			EW-50
108	0.8 PPM	OK			EW-67
109	0.7 PPM	OK			EW-47
110	0.7 PPM	OK			EW-54
111	0.7 PPM	OK			EW-55
112	0.7 PPM	OK			EW-92
113	0.6 PPM	OK			EW-91
114	1.1 PPM	OK			EW-96
115	0.6 PPM	OK			HC-1
116	0.8 PPM	OK			EW-66
117	0.6 PPM	OK			EW-58
118	1.9 PPM	OK			EW-57
119	0.7 PPM	OK			TP-1
120	0.6 PPM	OK			EW-59
121	4.9 PPM	OK			EW-100
122	1.5 PPM	OK			EW-56
123	0.7 PPM	OK			EW-97
124	0.5 PPM	OK			EW-53
125	0.7 PPM	OK			EW-51
126	0.5 PPM	OK			TP-5
127	0.6 PPM	OK			EW-68
128	0.7 PPM	OK			EW-87
129	0.9 PPM	OK			EW-38
130	0.5 PPM	OK			TP-7
131	0.5 PPM	OK			EW-49
132	0.5 PPM	OK			EW-83
133	0.5 PPM	OK			EW-65
134	0.5 PPM	OK			EW-81
135	0.5 PPM	OK			TP-8
136	0.9 PPM	OK			EW-64
137	0.4 PPM	OK			EW-63
138	9.7 PPM	OK			EW-42
139	1.2 PPM	OK			EW-76
140	0.4 PPM	OK			TP-9
141	0.4 PPM	OK			EW-62
142	0.5 PPM	OK			EW-74
143	0.5 PPM	OK			EW-32R
144	0.4 PPM	OK			EW-69

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - SEPTEMBER 4, 2026
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates		Comments
			Lat.	Long.	
145	0.5 PPM	OK			EW-71
146	1.3 PPM	OK			EW-72
147	0.5 PPM	OK			EW-70
148	2.1 PPM	OK			EW-73
149	1.2 PPM	OK			EW-78
150	9.1 PPM	OK			EW-82
151	2.5 PPM	OK			EW-36A
152	2.2 PPM	OK			EW-85
153	1.2 PPM	OK			EW-88
154	0.3 PPM	OK			EW-89
155	1.5 PPM	OK			EW-93
156	0.4 PPM	OK			EW-94
157	2.3 PPM	OK			EW-98
158	0.4 PPM	OK			EW-99
159	1.4 PPM	OK			EW-95
160	0.4 PPM	OK			EW-90
161	174.0 PPM	OK			EW-86
162	0.7 PPM	OK			EW-84
163	0.7 PPM	OK			EW-80
164	1.3 PPM	OK			EW-79
165	0.2 PPM	OK			EW-77
166	0.2 PPM	OK			EW-33B
167	202.0 PPM	OK			EW-75
168	0.3 PPM	OK			HC-2
Number of locations sampled: 168 Number of exceedance locations: 0					

NOTES:

Points 1 through 100 represent serpentine SEM route.
Points 101 through 168 represent SEM at Pipe Penetrations
Weather Conditions: Sunny, 81°F Wind: 3 mph N

Sampling Calibration: Methane - 500 ppm, Zero Air - 0.0 ppm

9/4/2026	8:59	ZERO	0.3	PPM
9/4/2026	9:01	SPAN	503.0	PPM

Background Reading:

9/4/2026	9:05	Upwind	2.5	PPM
9/4/2026	9:09	Downwind	2.6	PPM



15521 Midlothian Turnpike
Suite 305
Midlothian, VA 23113
804-378-7440
File No. 02218208.04

September 16, 2026

Ms. Susan "Tracey" Blalock
Air Compliance Specialist
Virginia Department of Environmental Quality
Southwest Regional Office
355-A Deadmore Street
Abingdon, VA 24210

Subject: Weekly Surface Emissions Monitoring Event – September 10, 2026
Bristol Integrated Solid Waste Management Facility – Bristol, Virginia

Dear Ms. Blalock:

On behalf of the City of Bristol (City), SCS Engineers (SCS) is pleased to submit the results of the Weekly Surface Emissions Monitoring event performed at the Bristol Integrated Solid Waste Management Facility located in Bristol, Virginia on September 10, 2026. This Weekly Surface Emissions Monitoring (SEM) Event was performed in accordance with Appendix A.1.i of the Consent Decree between the Commonwealth of Virginia and the City of Bristol.

The monitoring generally conforms to the requirements of 40 CFR 63.1960(c) and (d), and 40 CFR 60.36f(c) and (d), and 40 CFR 60, Appendix A, Method 21. The landfill gas (LFG) collection system is required to operate such that the methane concentration is less than 500 ppm above background at the landfill surface.

The monitoring route includes the entire waste footprint of Permit No. 588 Landfill. Sampling was conducted with a Thermo Scientific TVA-2020 Flame Ionization Detector at 30-meter intervals and where visual observations indicated the potential for elevated concentrations of LFG, such as distressed vegetation and surface cover cracks. In addition, in accordance with 40 CFR 63.1958(d)(ii)(2) and 40 CFR 60.34f(d), monitoring was conducted at all surface cover penetrations within the waste footprint, including at the temperature probes and horizontal collectors. The approximate monitoring route and sampling locations are presented in the attached Drawing.

At the time of monitoring, all areas of the Permit No. 588 Landfill footprint are subject to regulatory monitoring based on the regulatory schedule stipulated in 40 CFR 63.1960(b) and 40 CFR 60.36f(b). Permit No. 588 Landfill has a surface area of approximately 17.3 acres. Therefore, the minimum number of sampling points to cover the appropriate portion of the landfill footprint, utilizing a 30-meter grid interval, is approximately 82 (4.75 points per acre). A summary of the results of the surface emissions monitoring is provided in Table 1.

Table 1. Summary of Surface Emissions Monitoring

Description	Quantity
Number of Points Sampled	168
Number of Points in Serpentine Route	100
Number of Points at Surface Cover Penetrations	68
Number of Exceedances	0
Number of Serpentine Exceedances	0
Number of Pipe Penetration Exceedances	0

REMONITORING OF ONGOING EXCEEDANCES

In accordance with 40 CFR 63.1960(c)(4)(ii) and 40 CFR 60.36f(c)(4)(ii), corrective actions and a remonitoring event are to be performed within 10 days of the initial exceedance. In accordance with 40 CFR 63.1960(c)(4)(iii) and 40 CFR 60.36f(c)(4)(iii) additional corrective actions and a second 10-day retest are to be performed if the initial 10-day retest indicates methane values greater than the regulatory threshold. The Facility performs corrective actions, as necessary, including wellhead vacuum adjustments, the installation of well-bore seals, and addition of soil cover prior to weekly monitoring events at locations that previously exhibited elevated methane concentrations.

In accordance with 40 CFR 63.1960(c)(4)(v) and 40 CFR 60.36f(c)(4)(v) a new well or collection device must be installed or an alternate remedy must be submitted within 120 days at locations that continue to exhibit methane concentrations above the regulatory threshold for two consecutive re-tests.

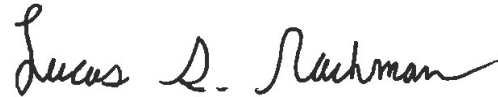
There are currently no ongoing exceedances.

If you have any questions or require additional information, please contact either of the undersigned.

Sincerely,



William J. Fabrie
Project Professional
SCS Engineers
540-529-2586
Wfabrie@scsengineers.com



Lucas S. Nachman
Senior Project Professional
SCS Engineers
804-840-5325
LNachman@scsengineers.com

Enclosure(s): Surface Emissions Monitoring Results
Bristol SEM Route Drawing

CC: Laura Helander, City of Bristol
Jon Hayes, City of Bristol
Logan Culhane, SCS Field Services

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - SEPTEMBER 10, 2026
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates		Comments
			Lat.	Long.	
1	2.3 PPM	OK			Start Serpentine Route
2	2.2 PPM	OK			
3	2.8 PPM	OK			
4	3.0 PPM	OK			
5	3.0 PPM	OK			
6	3.1 PPM	OK			
7	2.8 PPM	OK			
8	2.5 PPM	OK			
9	2.5 PPM	OK			
10	2.5 PPM	OK			
11	6.0 PPM	OK			
12	2.4 PPM	OK			
13	2.7 PPM	OK			
14	3.4 PPM	OK			
15	2.4 PPM	OK			
16	2.4 PPM	OK			
17	2.3 PPM	OK			
18	2.1 PPM	OK			
19	2.5 PPM	OK			
20	2.7 PPM	OK			
21	2.2 PPM	OK			
22	3.1 PPM	OK			
23	22.3 PPM	OK			
24	3.5 PPM	OK			
25	4.8 PPM	OK			
26	3.2 PPM	OK			
27	5.1 PPM	OK			
28	92.5 PPM	OK			
29	8.0 PPM	OK			
30	3.3 PPM	OK			
31	2.7 PPM	OK			
32	3.1 PPM	OK			
33	103.0 PPM	OK			
34	54.3 PPM	OK			
35	63.4 PPM	OK			
36	2.6 PPM	OK			
37	2.5 PPM	OK			
38	47.3 PPM	OK			
39	2.4 PPM	OK			
40	2.3 PPM	OK			
41	2.2 PPM	OK			
42	5.9 PPM	OK			
43	2.2 PPM	OK			
44	2.3 PPM	OK			
45	2.6 PPM	OK			
46	2.4 PPM	OK			
47	2.3 PPM	OK			
48	2.3 PPM	OK			

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - SEPTEMBER 10, 2026
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates		Comments
			Lat.	Long.	
49	2.1 PPM	OK			
50	2.2 PPM	OK			
51	2.3 PPM	OK			
52	2.2 PPM	OK			
53	2.2 PPM	OK			
54	31.2 PPM	OK			
55	5.4 PPM	OK			
56	8.3 PPM	OK			
57	15.6 PPM	OK			
58	23.6 PPM	OK			
59	1.9 PPM	OK			
60	2.9 PPM	OK			
61	7.2 PPM	OK			
62	4.2 PPM	OK			
63	6.0 PPM	OK			
64	1.8 PPM	OK			
65	1.5 PPM	OK			
66	1.5 PPM	OK			
67	1.5 PPM	OK			
68	1.6 PPM	OK			
69	1.5 PPM	OK			
70	1.9 PPM	OK			
71	4.8 PPM	OK			
72	6.1 PPM	OK			
73	1.6 PPM	OK			
74	1.6 PPM	OK			
75	1.7 PPM	OK			
76	1.6 PPM	OK			
77	1.5 PPM	OK			
78	1.5 PPM	OK			
79	1.6 PPM	OK			
80	3.3 PPM	OK			
81	1.7 PPM	OK			
82	1.7 PPM	OK			
83	1.7 PPM	OK			
84	1.5 PPM	OK			
85	1.5 PPM	OK			
86	4.2 PPM	OK			
87	1.4 PPM	OK			
88	1.4 PPM	OK			
89	1.4 PPM	OK			
90	1.4 PPM	OK			
91	1.8 PPM	OK			
92	2.3 PPM	OK			
93	1.5 PPM	OK			
94	1.3 PPM	OK			
95	1.2 PPM	OK			
96	1.3 PPM	OK			

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - SEPTEMBER 10, 2026
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates		Comments
			Lat.	Long.	
97	1.3 PPM	OK			
98	1.3 PPM	OK			
99	1.2 PPM	OK			
100	1.2 PPM	OK			End Serpentine Route
101	10.9 PPM	OK			EW-52
102	1.2 PPM	OK			TP-4
103	70.9 PPM	OK			EW-60
104	1.4 PPM	OK			EW-48
105	2.6 PPM	OK			TP-6
106	2.5 PPM	OK			EW-61
107	2.0 PPM	OK			EW-50
108	1.7 PPM	OK			EW-67
109	1.4 PPM	OK			EW-47
110	1.3 PPM	OK			EW-54
111	1.4 PPM	OK			EW-55
112	2.2 PPM	OK			EW-92
113	1.8 PPM	OK			EW-91
114	1.6 PPM	OK			EW-96
115	1.8 PPM	OK			HC-1
116	2.9 PPM	OK			EW-66
117	1.1 PPM	OK			EW-58
118	2.5 PPM	OK			EW-57
119	1.4 PPM	OK			TP-1
120	1.2 PPM	OK			EW-59
121	4.2 PPM	OK			EW-100
122	1.5 PPM	OK			EW-56
123	1.1 PPM	OK			EW-97
124	1.1 PPM	OK			EW-53
125	1.3 PPM	OK			EW-51
126	1.3 PPM	OK			TP-5
127	1.4 PPM	OK			EW-68
128	1.2 PPM	OK			EW-87
129	1.1 PPM	OK			EW-38
130	1.1 PPM	OK			TP-7
131	2.4 PPM	OK			EW-49
132	1.1 PPM	OK			EW-83
133	1.2 PPM	OK			EW-65
134	1.2 PPM	OK			EW-81
135	1.2 PPM	OK			TP-8
136	2.3 PPM	OK			EW-64
137	1.3 PPM	OK			EW-63
138	4.5 PPM	OK			EW-42
139	2.4 PPM	OK			EW-76
140	1.9 PPM	OK			TP-9
141	1.4 PPM	OK			EW-62
142	1.5 PPM	OK			EW-74
143	1.7 PPM	OK			EW-32R
144	1.1 PPM	OK			EW-69

**EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - SEPTEMBER 10, 2026
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA**

ID #	Methane Concentration	Compliance	GPS Coordinates		Comments
			Lat.	Long.	
145	0.8 PPM	OK			EW-71
146	1.1 PPM	OK			EW-72
147	1.2 PPM	OK			EW-70
148	1.6 PPM	OK			EW-73
149	0.9 PPM	OK			EW-78
150	12.1 PPM	OK			EW-82
151	1.7 PPM	OK			EW-36A
152	1.1 PPM	OK			EW-85
153	4.8 PPM	OK			EW-88
154	4.6 PPM	OK			HC-2
155	4.4 PPM	OK			EW-89
156	10.2 PPM	OK			EW-93
157	1.1 PPM	OK			EW-94
158	1.6 PPM	OK			EW-98
159	23.4 PPM	OK			EW-99
160	1.1 PPM	OK			EW-95
161	119.0 PPM	OK			EW-90
162	1.1 PPM	OK			EW-86
163	1.2 PPM	OK			EW-84
164	1.3 PPM	OK			EW-80
165	1.1 PPM	OK			EW-79
166	1.2 PPM	OK			EW-77
167	0.9 PPM	OK			EW-33B
168	354.0 PPM	OK			EW-75

Number of locations sampled:	168
Number of exceedance locations:	0

NOTES:

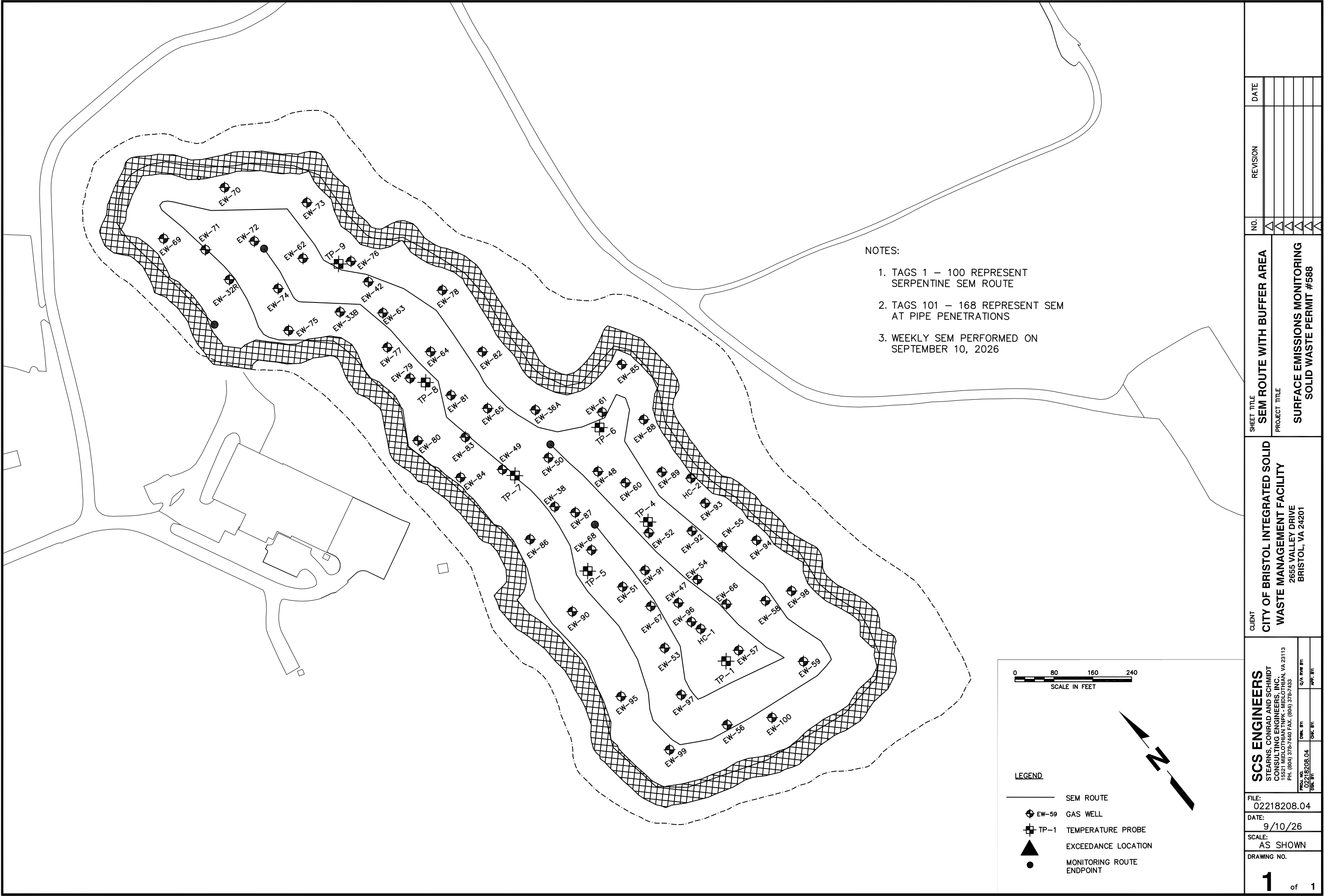
Points 1 through 100 represent serpentine SEM route.
Points 101 through 168 represent SEM at Pipe Penetrations
Weather Conditions: Partly Cloudy, 72°F Wind: 5 mph SW

Sampling Calibration: Methane - 500 ppm, Zero Air - 0.0 ppm

9/10/2026	8:45	ZERO	0.2	PPM
9/10/2026	8:47	SPAN	499.0	PPM

Background Reading:

9/10/2026	8:50	Upwind	2.9	PPM
9/10/2026	8:54	Downwind	2.5	PPM



SHEET TITLE		NO.		REVISION		DATE	
SEM ROUTE WITH BUFFER AREA		1					
PROJECT TITLE		1					
SURFACE EMISSIONS MONITORING		1					
SOLID WASTE PERMIT #588		1					

CLIENT		CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY	
		2655 VALLEY DRIVE BRISTOL, VA 24201	

SCS ENGINEERS		STEARN, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC.	
		15521 MIDLOTHIAN TRAIL, MIDLOTHIAN, VA 23113	
		PH. (804) 378-7440 FAX. (804) 378-7433	
PROJ. NO.	02218208.04	DRAWN BY:	C/A R/W BY:
DATE:	9/10/26	CHECK BY:	APP. BY:

FILE:	02218208.04
DATE:	9/10/26
SCALE:	AS SHOWN
DRAWING NO.	1 of 1



15521 Midlothian Turnpike
Suite 305
Midlothian, VA 23113
804-378-7440
File No. 02218208.04

September 23, 2026

Ms. Susan "Tracey" Blalock
Air Compliance Specialist
Virginia Department of Environmental Quality
Southwest Regional Office
355-A Deadmore Street
Abingdon, VA 24210

Subject: Weekly Surface Emissions Monitoring Event – September 18, 2026
Bristol Integrated Solid Waste Management Facility – Bristol, Virginia

Dear Ms. Blalock:

On behalf of the City of Bristol (City), SCS Engineers (SCS) is pleased to submit the results of the Weekly Surface Emissions Monitoring event performed at the Bristol Integrated Solid Waste Management Facility located in Bristol, Virginia on September 18, 2026. This Weekly Surface Emissions Monitoring (SEM) Event was performed in accordance with Appendix A.1.i of the Consent Decree between the Commonwealth of Virginia and the City of Bristol.

The monitoring generally conforms to the requirements of 40 CFR 63.1960(c) and (d), and 40 CFR 60.36f(c) and (d), and 40 CFR 60, Appendix A, Method 21. The landfill gas (LFG) collection system is required to operate such that the methane concentration is less than 500 ppm above background at the landfill surface.

The monitoring route includes the entire waste footprint of Permit No. 588 Landfill. Sampling was conducted with a Thermo Scientific TVA-2020 Flame Ionization Detector at 30-meter intervals and where visual observations indicated the potential for elevated concentrations of LFG, such as distressed vegetation and surface cover cracks. In addition, in accordance with 40 CFR 63.1958(d)(ii)(2) and 40 CFR 60.34f(d), monitoring was conducted at all surface cover penetrations within the waste footprint, including at the temperature probes and horizontal collectors. The approximate monitoring route and sampling locations are presented in the attached Drawing.

At the time of monitoring, all areas of the Permit No. 588 Landfill footprint are subject to regulatory monitoring based on the regulatory schedule stipulated in 40 CFR 63.1960(b) and 40 CFR 60.36f(b). Permit No. 588 Landfill has a surface area of approximately 17.3 acres. Therefore, the minimum number of sampling points to cover the appropriate portion of the landfill footprint, utilizing a 30-meter grid interval, is approximately 82 (4.75 points per acre). A summary of the results of the surface emissions monitoring is provided in Table 1.

Table 1. Summary of Surface Emissions Monitoring

Description	Quantity
Number of Points Sampled	168
Number of Points in Serpentine Route	100
Number of Points at Surface Cover Penetrations	68
Number of Exceedances	0
Number of Serpentine Exceedances	0
Number of Pipe Penetration Exceedances	0

REMONITORING OF ONGOING EXCEEDANCES

In accordance with 40 CFR 63.1960(c)(4)(ii) and 40 CFR 60.36f(c)(4)(ii), corrective actions and a remonitoring event are to be performed within 10 days of the initial exceedance. In accordance with 40 CFR 63.1960(c)(4)(iii) and 40 CFR 60.36f(c)(4)(iii) additional corrective actions and a second 10-day retest are to be performed if the initial 10-day retest indicates methane values greater than the regulatory threshold. The Facility performs corrective actions, as necessary, including wellhead vacuum adjustments, the installation of well-bore seals, and addition of soil cover prior to weekly monitoring events at locations that previously exhibited elevated methane concentrations.

In accordance with 40 CFR 63.1960(c)(4)(v) and 40 CFR 60.36f(c)(4)(v) a new well or collection device must be installed or an alternate remedy must be submitted within 120 days at locations that continue to exhibit methane concentrations above the regulatory threshold for two consecutive re-tests.

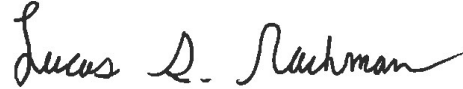
There are currently no ongoing exceedances.

If you have any questions or require additional information, please contact either of the undersigned.

Sincerely,



William J. Fabrie
Project Professional
SCS Engineers
540-529-2586
Wfabrie@scsengineers.com



Lucas S. Nachman
Senior Project Professional
SCS Engineers
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Enclosure(s): Surface Emissions Monitoring Results
Bristol SEM Route Drawing

CC: Laura Helander, City of Bristol
Jon Hayes, City of Bristol
Logan Culhane, SCS Field Services

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - SEPTEMBER 18, 2026
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates		Comments
			Lat.	Long.	
1	9.7 PPM	OK			Start Serpentine Route
2	2.8 PPM	OK			
3	2.7 PPM	OK			
4	2.6 PPM	OK			
5	2.3 PPM	OK			
6	2.2 PPM	OK			
7	2.4 PPM	OK			
8	2.5 PPM	OK			
9	2.4 PPM	OK			
10	2.8 PPM	OK			
11	2.7 PPM	OK			
12	2.8 PPM	OK			
13	2.9 PPM	OK			
14	2.9 PPM	OK			
15	3.0 PPM	OK			
16	2.9 PPM	OK			
17	2.6 PPM	OK			
18	3.9 PPM	OK			
19	4.0 PPM	OK			
20	2.5 PPM	OK			
21	2.2 PPM	OK			
22	2.5 PPM	OK			
23	2.4 PPM	OK			
24	2.3 PPM	OK			
25	2.3 PPM	OK			
26	2.2 PPM	OK			
27	2.4 PPM	OK			
28	1.8 PPM	OK			
29	1.8 PPM	OK			
30	1.7 PPM	OK			
31	1.8 PPM	OK			
32	5.3 PPM	OK			
33	3.6 PPM	OK			
34	3.7 PPM	OK			
35	3.3 PPM	OK			
36	5.8 PPM	OK			
37	155.0 PPM	OK			
38	32.0 PPM	OK			
39	60.0 PPM	OK			
40	5.3 PPM	OK			
41	2.6 PPM	OK			
42	2.4 PPM	OK			
43	2.3 PPM	OK			
44	3.0 PPM	OK			
45	3.2 PPM	OK			
46	2.4 PPM	OK			
47	4.7 PPM	OK			
48	2.1 PPM	OK			

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - SEPTEMBER 18, 2026
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates		Comments
			Lat.	Long.	
49	1.8 PPM	OK			
50	1.7 PPM	OK			
51	1.7 PPM	OK			
52	1.8 PPM	OK			
53	2.6 PPM	OK			
54	2.8 PPM	OK			
55	1.8 PPM	OK			
56	2.2 PPM	OK			
57	2.1 PPM	OK			
58	1.9 PPM	OK			
59	4.7 PPM	OK			
60	1.9 PPM	OK			
61	2.0 PPM	OK			
62	5.4 PPM	OK			
63	48.9 PPM	OK			
64	71.9 PPM	OK			
65	2.7 PPM	OK			
66	1.9 PPM	OK			
67	1.8 PPM	OK			
68	3.6 PPM	OK			
69	4.2 PPM	OK			
70	3.3 PPM	OK			
71	1.7 PPM	OK			
72	1.7 PPM	OK			
73	1.7 PPM	OK			
74	1.8 PPM	OK			
75	10.4 PPM	OK			
76	6.8 PPM	OK			
77	4.6 PPM	OK			
78	1.8 PPM	OK			
79	1.7 PPM	OK			
80	1.7 PPM	OK			
81	1.4 PPM	OK			
82	1.4 PPM	OK			
83	1.4 PPM	OK			
84	1.4 PPM	OK			
85	1.7 PPM	OK			
86	1.8 PPM	OK			
87	1.9 PPM	OK			
88	2.0 PPM	OK			
89	1.6 PPM	OK			
90	1.8 PPM	OK			
91	1.6 PPM	OK			
92	1.7 PPM	OK			
93	1.8 PPM	OK			
94	1.3 PPM	OK			
95	1.2 PPM	OK			
96	1.2 PPM	OK			

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - SEPTEMBER 18, 2026
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates		Comments
			Lat.	Long.	
97	1.3 PPM	OK			
98	2.9 PPM	OK			
99	1.3 PPM	OK			
100	1.3 PPM	OK			End Serpentine Route
101	8.8 PPM	OK			EW-52
102	1.2 PPM	OK			TP-4
103	74.3 PPM	OK			EW-60
104	1.4 PPM	OK			EW-48
105	2.1 PPM	OK			TP-6
106	3.8 PPM	OK			EW-61
107	2.2 PPM	OK			EW-50
108	1.1 PPM	OK			EW-67
109	1.1 PPM	OK			EW-47
110	1.1 PPM	OK			EW-54
111	1.1 PPM	OK			EW-55
112	1.1 PPM	OK			EW-92
113	1.1 PPM	OK			EW-91
114	1.2 PPM	OK			EW-96
115	1.1 PPM	OK			HC-1
116	1.1 PPM	OK			EW-66
117	1.3 PPM	OK			EW-58
118	2.0 PPM	OK			EW-57
119	1.6 PPM	OK			TP-1
120	1.0 PPM	OK			EW-59
121	10.0 PPM	OK			EW-100
122	4.7 PPM	OK			EW-56
123	1.2 PPM	OK			EW-97
124	1.1 PPM	OK			EW-53
125	1.1 PPM	OK			EW-51
126	1.8 PPM	OK			TP-5
127	2.7 PPM	OK			EW-68
128	1.1 PPM	OK			EW-87
129	1.0 PPM	OK			EW-38
130	1.3 PPM	OK			TP-7
131	2.1 PPM	OK			EW-49
132	2.4 PPM	OK			EW-83
133	1.5 PPM	OK			EW-65
134	2.7 PPM	OK			EW-81
135	2.4 PPM	OK			TP-8
136	5.0 PPM	OK			EW-64
137	3.3 PPM	OK			EW-63
138	1.3 PPM	OK			EW-42
139	2.1 PPM	OK			EW-76
140	1.4 PPM	OK			TP-9
141	1.0 PPM	OK			EW-62
142	1.0 PPM	OK			EW-74
143	0.9 PPM	OK			EW-32R
144	0.8 PPM	OK			EW-69

**EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - SEPTEMBER 18, 2026
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA**

ID #	Methane Concentration	Compliance	GPS Coordinates		Comments
			Lat.	Long.	
145	0.8 PPM	OK			EW-71
146	0.9 PPM	OK			EW-72
147	1.0 PPM	OK			EW-70
148	1.6 PPM	OK			EW-73
149	6.3 PPM	OK			EW-78
150	3.3 PPM	OK			EW-82
151	1.1 PPM	OK			EW-36A
152	0.9 PPM	OK			EW-85
153	2.4 PPM	OK			EW-88
154	0.8 PPM	OK			HC-2
155	11.8 PPM	OK			EW-89
156	1.6 PPM	OK			EW-93
157	0.8 PPM	OK			EW-94
158	1.0 PPM	OK			EW-98
159	1.0 PPM	OK			EW-99
160	1.2 PPM	OK			EW-95
161	184.0 PPM	OK			EW-90
162	1.1 PPM	OK			EW-86
163	1.2 PPM	OK			EW-84
164	2.3 PPM	OK			EW-80
165	1.0 PPM	OK			EW-79
166	1.0 PPM	OK			EW-77
167	0.9 PPM	OK			EW-33B
168	1.7 PPM	OK			EW-75

Number of locations sampled:	168
Number of exceedance locations:	0

NOTES:

Points 1 through 100 represent serpentine SEM route.

Points 101 through 168 represent SEM at Pipe Penetrations

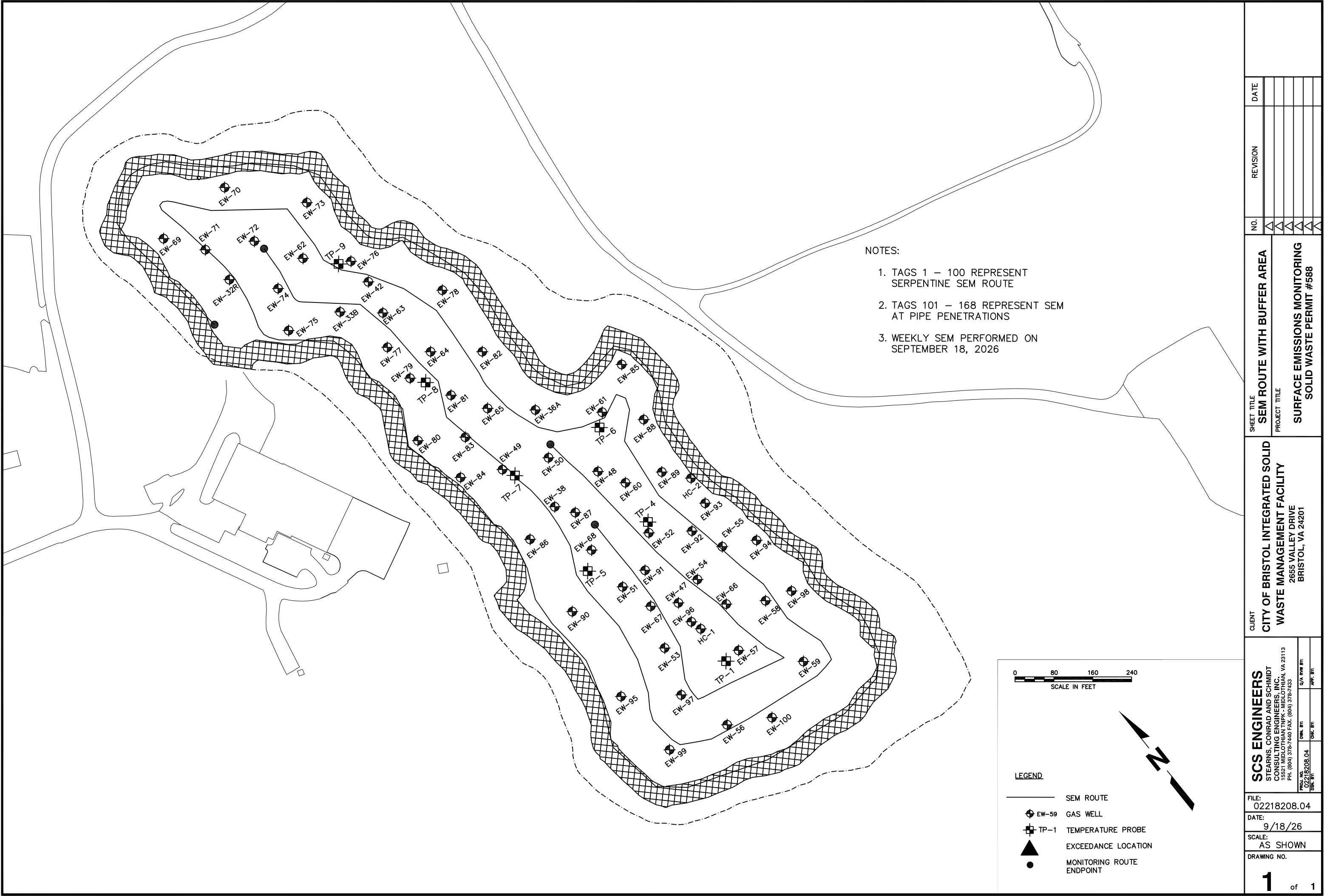
Weather Conditions: Partly Cloudy, 79°F Wind: 7 mph SW

Sampling Calibration: Methane - 500 ppm, Zero Air - 0.0 ppm

9/18/2026	8:46	ZERO	0.3	PPM
9/18/2026	8:48	SPAN	500.0	PPM

Background Reading:

9/18/2026	8:52	Upwind	2.6	PPM
9/18/2026	8:55	Downwind	3.3	PPM



SHEET TITLE		NO.		REVISION		DATE	
SEM ROUTE WITH BUFFER AREA		1					
PROJECT TITLE		1					
SURFACE EMISSIONS MONITORING		1					
SOLID WASTE PERMIT #588		1					

CLIENT		CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY	
		2655 VALLEY DRIVE BRISTOL, VA 24201	

SCS ENGINEERS		STEARN, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC.	
		15521 MIDLOTHIAN TRAIL, MIDLOTHIAN, VA 23113	
		PH. (804) 378-7440 FAX. (804) 378-7433	
PROJ. NO.	02218208.04	DRAWN BY:	C/A R/W BY:
DATE:	9/18/26	CHECK BY:	APP. BY:

FILE:	02218208.04
DATE:	9/18/26
SCALE:	AS SHOWN
DRAWING NO.	1 of 1



15521 Midlothian Turnpike
Suite 305
Midlothian, VA 23113
804-378-7440
File No. 02218208.04

September 30, 2026

Ms. Susan "Tracey" Blalock
Air Compliance Specialist
Virginia Department of Environmental Quality
Southwest Regional Office
355-A Deadmore Street
Abingdon, VA 24210

Subject: Weekly Surface Emissions Monitoring Event – September 25, 2026
Bristol Integrated Solid Waste Management Facility – Bristol, Virginia

Dear Ms. Blalock:

On behalf of the City of Bristol (City), SCS Engineers (SCS) is pleased to submit the results of the Weekly Surface Emissions Monitoring event performed at the Bristol Integrated Solid Waste Management Facility located in Bristol, Virginia on September 25, 2026. This Weekly Surface Emissions Monitoring (SEM) Event was performed in accordance with Appendix A.1.i of the Consent Decree between the Commonwealth of Virginia and the City of Bristol.

The monitoring generally conforms to the requirements of 40 CFR 63.1960(c) and (d), and 40 CFR 60.36f(c) and (d), and 40 CFR 60, Appendix A, Method 21. The landfill gas (LFG) collection system is required to operate such that the methane concentration is less than 500 ppm above background at the landfill surface.

The monitoring route includes the entire waste footprint of Permit No. 588 Landfill. Sampling was conducted with a Thermo Scientific TVA-2020 Flame Ionization Detector at 30-meter intervals and where visual observations indicated the potential for elevated concentrations of LFG, such as distressed vegetation and surface cover cracks. In addition, in accordance with 40 CFR 63.1958(d)(ii)(2) and 40 CFR 60.34f(d), monitoring was conducted at all surface cover penetrations within the waste footprint, including at the temperature probes and horizontal collectors. The approximate monitoring route and sampling locations are presented in the attached Drawing.

At the time of monitoring, all areas of the Permit No. 588 Landfill footprint are subject to regulatory monitoring based on the regulatory schedule stipulated in 40 CFR 63.1960(b) and 40 CFR 60.36f(b). Permit No. 588 Landfill has a surface area of approximately 17.3 acres. Therefore, the minimum number of sampling points to cover the appropriate portion of the landfill footprint, utilizing a 30-meter grid interval, is approximately 82 (4.75 points per acre). A summary of the results of the surface emissions monitoring is provided in Table 1.

Table 1. Summary of Surface Emissions Monitoring

Description	Quantity
Number of Points Sampled	168
Number of Points in Serpentine Route	100
Number of Points at Surface Cover Penetrations	68
Number of Exceedances	0
Number of Serpentine Exceedances	0
Number of Pipe Penetration Exceedances	0

REMONITORING OF ONGOING EXCEEDANCES

In accordance with 40 CFR 63.1960(c)(4)(ii) and 40 CFR 60.36f(c)(4)(ii), corrective actions and a remonitoring event are to be performed within 10 days of the initial exceedance. In accordance with 40 CFR 63.1960(c)(4)(iii) and 40 CFR 60.36f(c)(4)(iii) additional corrective actions and a second 10-day retest are to be performed if the initial 10-day retest indicates methane values greater than the regulatory threshold. The Facility performs corrective actions, as necessary, including wellhead vacuum adjustments, the installation of well-bore seals, and addition of soil cover prior to weekly monitoring events at locations that previously exhibited elevated methane concentrations.

In accordance with 40 CFR 63.1960(c)(4)(v) and 40 CFR 60.36f(c)(4)(v) a new well or collection device must be installed or an alternate remedy must be submitted within 120 days at locations that continue to exhibit methane concentrations above the regulatory threshold for two consecutive re-tests.

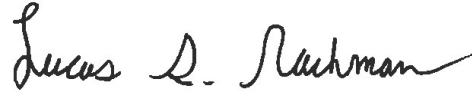
There are currently no ongoing exceedances.

If you have any questions or require additional information, please contact either of the undersigned.

Sincerely,



William J. Fabrie
Project Professional
SCS Engineers
540-529-2586
Wfabrie@scsengineers.com



Lucas S. Nachman
Senior Project Professional
SCS Engineers
804-840-5325
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Enclosure(s): Surface Emissions Monitoring Results
Bristol SEM Route Drawing

CC: Laura Helander, City of Bristol
Jon Hayes, City of Bristol
Logan Culhane, SCS Field Services

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - SEPTEMBER 25, 2026
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates		Comments
			Lat.	Long.	
1	2.4 PPM	OK			Start Serpentine Route
2	2.5 PPM	OK			
3	2.5 PPM	OK			
4	2.3 PPM	OK			
5	2.4 PPM	OK			
6	2.3 PPM	OK			
7	2.3 PPM	OK			
8	2.3 PPM	OK			
9	2.4 PPM	OK			
10	3.3 PPM	OK			
11	3.2 PPM	OK			
12	3.1 PPM	OK			
13	2.9 PPM	OK			
14	4.0 PPM	OK			
15	3.1 PPM	OK			
16	13.9 PPM	OK			
17	4.9 PPM	OK			
18	4.8 PPM	OK			
19	3.5 PPM	OK			
20	3.8 PPM	OK			
21	4.1 PPM	OK			
22	4.4 PPM	OK			
23	5.4 PPM	OK			
24	7.8 PPM	OK			
25	4.6 PPM	OK			
26	28.8 PPM	OK			
27	4.7 PPM	OK			
28	3.0 PPM	OK			
29	2.3 PPM	OK			
30	2.3 PPM	OK			
31	2.2 PPM	OK			
32	2.4 PPM	OK			
33	2.3 PPM	OK			
34	7.8 PPM	OK			
35	18.2 PPM	OK			
36	14.2 PPM	OK			
37	9.1 PPM	OK			
38	8.3 PPM	OK			
39	2.2 PPM	OK			
40	2.6 PPM	OK			
41	2.9 PPM	OK			
42	3.7 PPM	OK			
43	2.6 PPM	OK			
44	2.8 PPM	OK			
45	5.0 PPM	OK			
46	3.1 PPM	OK			
47	3.2 PPM	OK			
48	2.7 PPM	OK			

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - SEPTEMBER 25, 2026
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates		Comments
			Lat.	Long.	
49	2.2 PPM	OK			
50	2.1 PPM	OK			
51	2.1 PPM	OK			
52	2.0 PPM	OK			
53	2.0 PPM	OK			
54	2.0 PPM	OK			
55	2.0 PPM	OK			
56	2.0 PPM	OK			
57	2.0 PPM	OK			
58	2.0 PPM	OK			
59	2.2 PPM	OK			
60	1.9 PPM	OK			
61	2.0 PPM	OK			
62	1.9 PPM	OK			
63	3.0 PPM	OK			
64	7.1 PPM	OK			
65	4.4 PPM	OK			
66	3.1 PPM	OK			
67	2.5 PPM	OK			
68	2.1 PPM	OK			
69	2.0 PPM	OK			
70	3.0 PPM	OK			
71	2.6 PPM	OK			
72	2.1 PPM	OK			
73	2.4 PPM	OK			
74	2.4 PPM	OK			
75	2.4 PPM	OK			
76	3.3 PPM	OK			
77	13.8 PPM	OK			
78	13.3 PPM	OK			
79	2.1 PPM	OK			
80	2.2 PPM	OK			
81	2.8 PPM	OK			
82	2.8 PPM	OK			
83	4.9 PPM	OK			
84	2.2 PPM	OK			
85	4.1 PPM	OK			
86	2.4 PPM	OK			
87	2.0 PPM	OK			
88	2.0 PPM	OK			
89	2.0 PPM	OK			
90	6.2 PPM	OK			
91	1.9 PPM	OK			
92	1.8 PPM	OK			
93	2.3 PPM	OK			
94	2.6 PPM	OK			
95	6.2 PPM	OK			
96	1.7 PPM	OK			

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - SEPTEMBER 25, 2026
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates		Comments
			Lat.	Long.	
97	1.7 PPM	OK			
98	4.9 PPM	OK			
99	2.0 PPM	OK			
100	2.4 PPM	OK			End Serpentine Route
101	160.0 PPM	OK			EW-52
102	2.8 PPM	OK			TP-4
103	111.0 PPM	OK			EW-60
104	1.7 PPM	OK			EW-48
105	1.6 PPM	OK			TP-6
106	1.6 PPM	OK			EW-61
107	1.6 PPM	OK			EW-50
108	1.6 PPM	OK			EW-67
109	1.6 PPM	OK			EW-47
110	1.7 PPM	OK			EW-54
111	1.9 PPM	OK			EW-55
112	1.9 PPM	OK			EW-92
113	4.4 PPM	OK			EW-91
114	2.0 PPM	OK			EW-96
115	1.9 PPM	OK			HC-1
116	2.9 PPM	OK			EW-66
117	2.5 PPM	OK			EW-58
118	1.9 PPM	OK			EW-57
119	2.0 PPM	OK			TP-1
120	3.5 PPM	OK			EW-59
121	1.7 PPM	OK			EW-100
122	1.6 PPM	OK			EW-56
123	1.6 PPM	OK			EW-97
124	1.4 PPM	OK			EW-53
125	2.0 PPM	OK			EW-51
126	1.5 PPM	OK			TP-5
127	1.6 PPM	OK			EW-68
128	1.6 PPM	OK			EW-87
129	1.5 PPM	OK			EW-38
130	1.5 PPM	OK			TP-7
131	1.5 PPM	OK			EW-49
132	5.7 PPM	OK			EW-83
133	3.3 PPM	OK			EW-65
134	1.7 PPM	OK			EW-81
135	1.3 PPM	OK			TP-8
136	1.3 PPM	OK			EW-64
137	1.3 PPM	OK			EW-63
138	1.3 PPM	OK			EW-42
139	1.3 PPM	OK			EW-76
140	1.8 PPM	OK			TP-9
141	1.3 PPM	OK			EW-62
142	1.5 PPM	OK			EW-74
143	1.2 PPM	OK			EW-32R
144	1.2 PPM	OK			EW-69

EXHIBIT 1. SURFACE EMISSIONS MONITORING RESULTS
WEEKLY MONITORING EVENT - SEPTEMBER 25, 2026
BRISTOL INTEGRATED SOLID WASTE FACILITY - BRISTOL, VIRGINIA

ID #	Methane Concentration	Compliance	GPS Coordinates		Comments
			Lat.	Long.	
145	1.2 PPM	OK			EW-71
146	1.2 PPM	OK			EW-72
147	1.2 PPM	OK			EW-70
148	1.1 PPM	OK			EW-73
149	1.2 PPM	OK			EW-78
150	1.4 PPM	OK			EW-82
151	1.1 PPM	OK			EW-36A
152	1.3 PPM	OK			EW-85
153	1.2 PPM	OK			EW-88
154	1.2 PPM	OK			HC-2
155	1.1 PPM	OK			EW-89
156	1.3 PPM	OK			EW-93
157	1.3 PPM	OK			EW-94
158	1.9 PPM	OK			EW-98
159	4.6 PPM	OK			EW-99
160	36.8 PPM	OK			EW-95
161	1.1 PPM	OK			EW-90
162	110.0 PPM	OK			EW-86
163	1.1 PPM	OK			EW-84
164	1.0 PPM	OK			EW-80
165	3.1 PPM	OK			EW-79
166	1.2 PPM	OK			EW-77
167	1.5 PPM	OK			EW-33B
168	1.4 PPM	OK			EW-75

Number of locations sampled: 168

Number of exceedance locations: 0

NOTES:

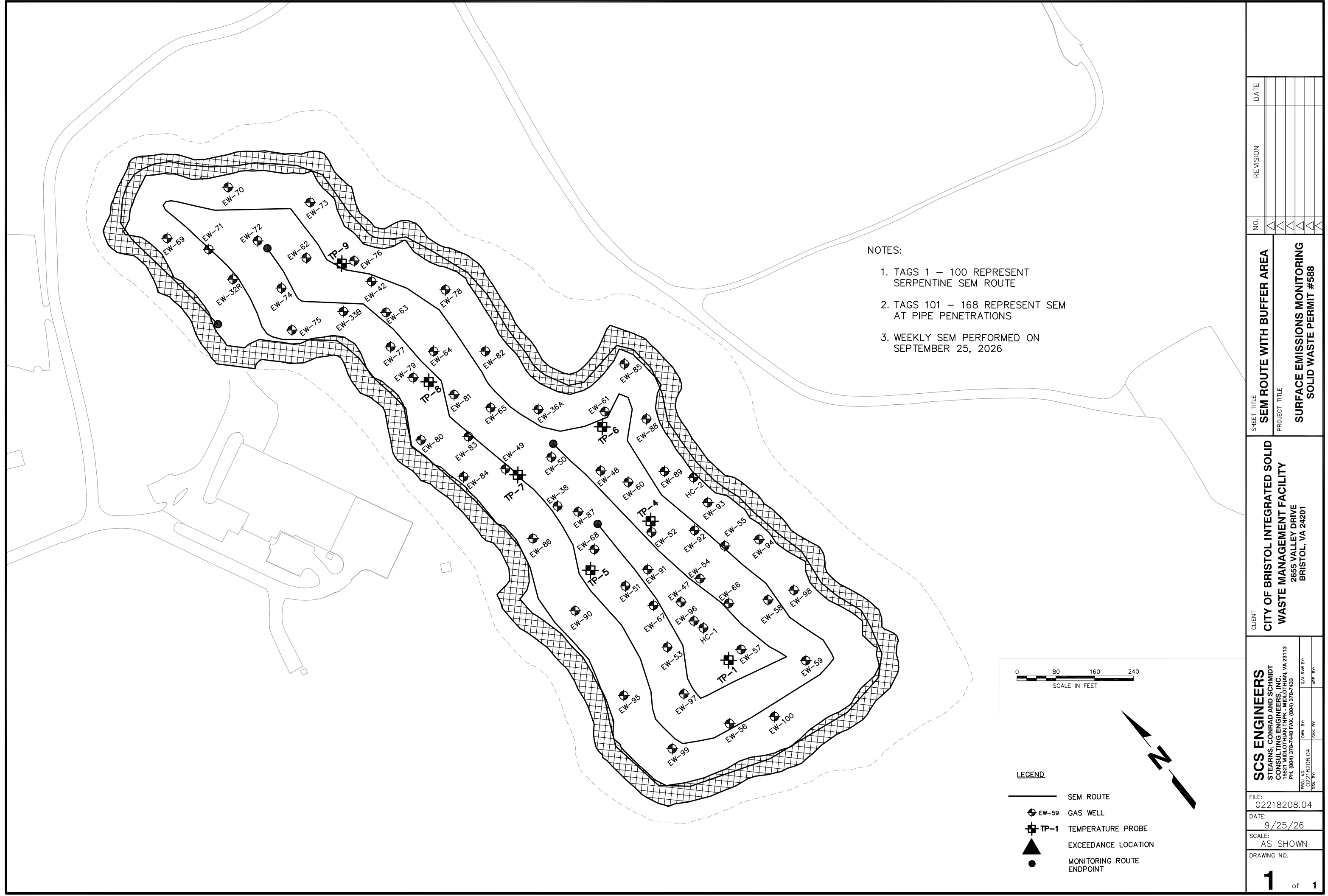
Points 1 through 100 represent serpentine SEM route.
Points 101 through 168 represent SEM at Pipe Penetrations
Weather Conditions: Sunny, 56°F Wind: 8 mph SE

Sampling Calibration: Methane - 500 ppm, Zero Air - 0.0 ppm

9/25/2026	9:15	ZERO	0.3	PPM
9/25/2026	9:17	SPAN	502.0	PPM

Background Reading:

9/25/2026	9:23	Upwind	2.8	PPM
9/25/2026	9:31	Downwind	3.2	PPM



SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC. 15521 MIDLOTHIAN TPK. - MIDLOTHIAN, VA 23113 PH. (804) 378-7440 FAX. (804) 378-7433		CLIENT CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY 2655 VALLEY DRIVE BRISTOL, VA 24201		SHEET TITLE SEM ROUTE WITH BUFFER AREA		NO.		REVISION		DATE	
FILE: 02218208.04 DATE: 9/25/26 SCALE: AS SHOWN DRAWING NO. 1 of 1		PROJ. NO. 02218208.04 DWN. BY: CHK. BY: APP. BY:		PROJECT TITLE SURFACE EMISSIONS MONITORING SOLID WASTE PERMIT #588							

APPENDIX B | IN-WASTE TEMPERATURES ON SELECT DAYS

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Figure B - 20 Average Temperatures Recorded by TP-9 on September 30, 2026.....	13

Figure B - 1 Average Temperatures Recorded by TP-1 on September 2, 2026

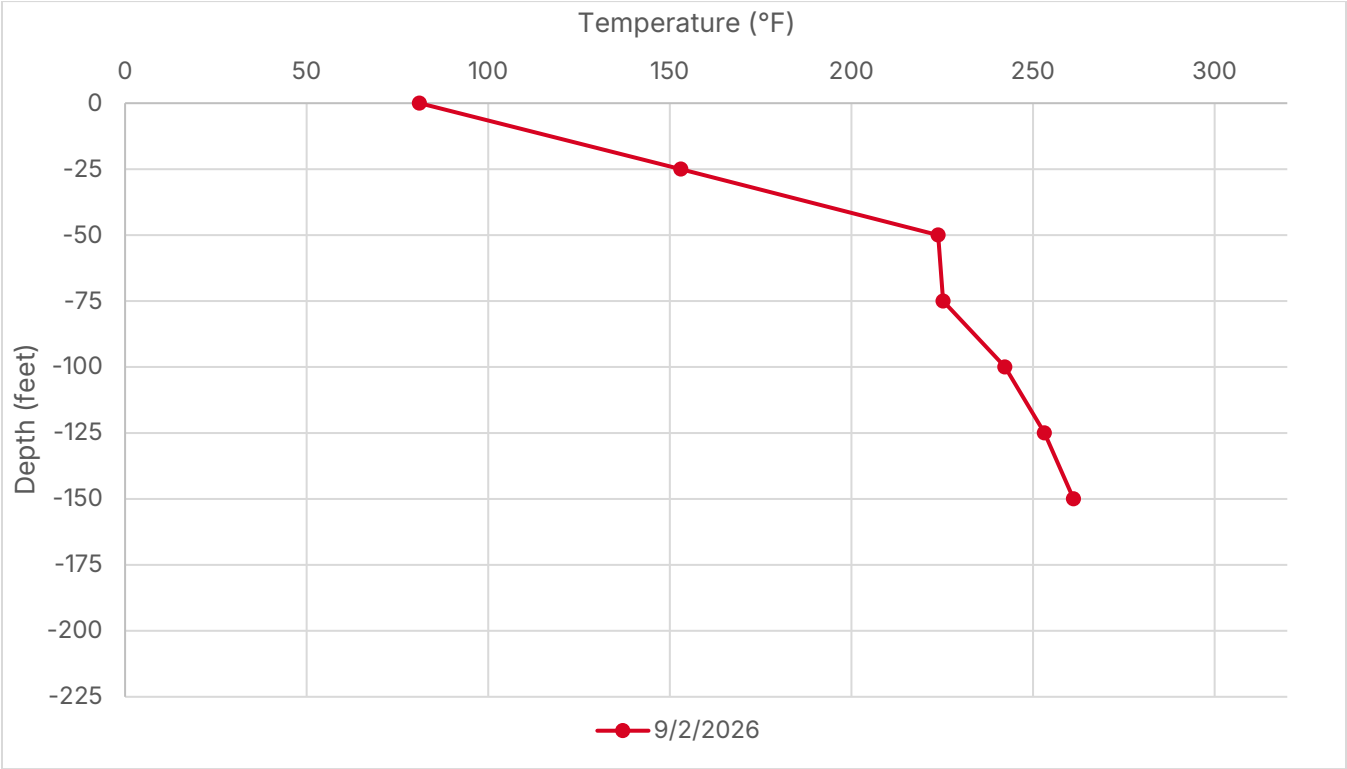


Figure B - 2 Average Temperatures Recorded by TP-1 on September 9, 2026

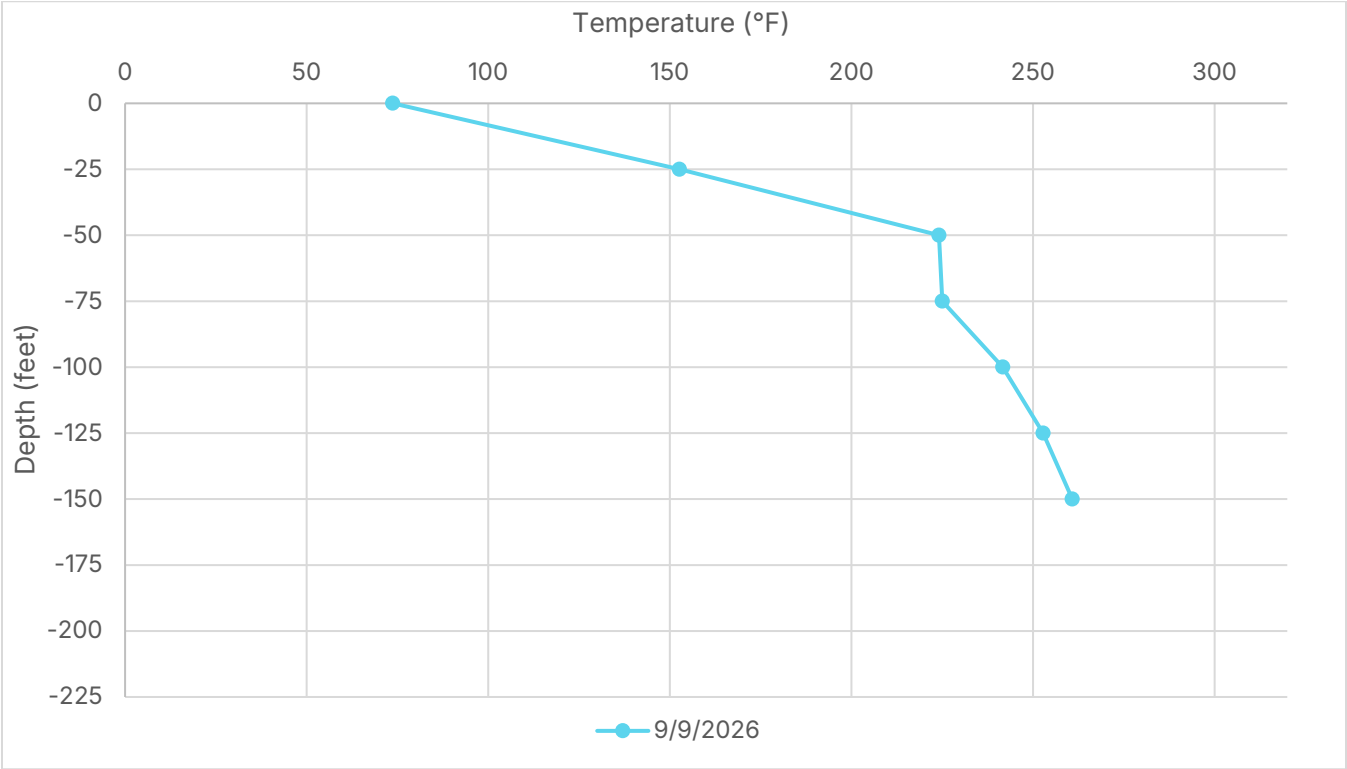


Figure B - 3 Average Temperatures Recorded by TP-1 on September 16, 2026

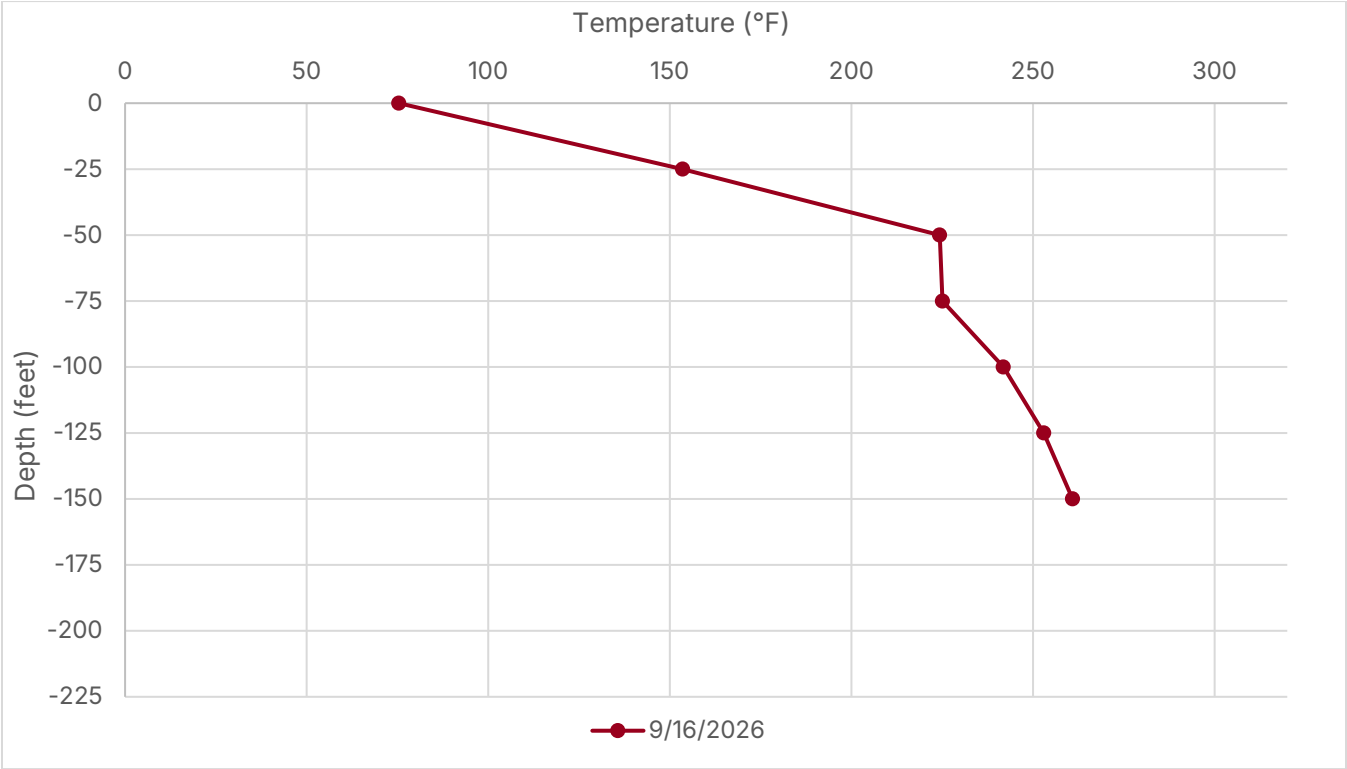


Figure B - 4 Average Temperatures Recorded by TP-1 on September 23, 2026

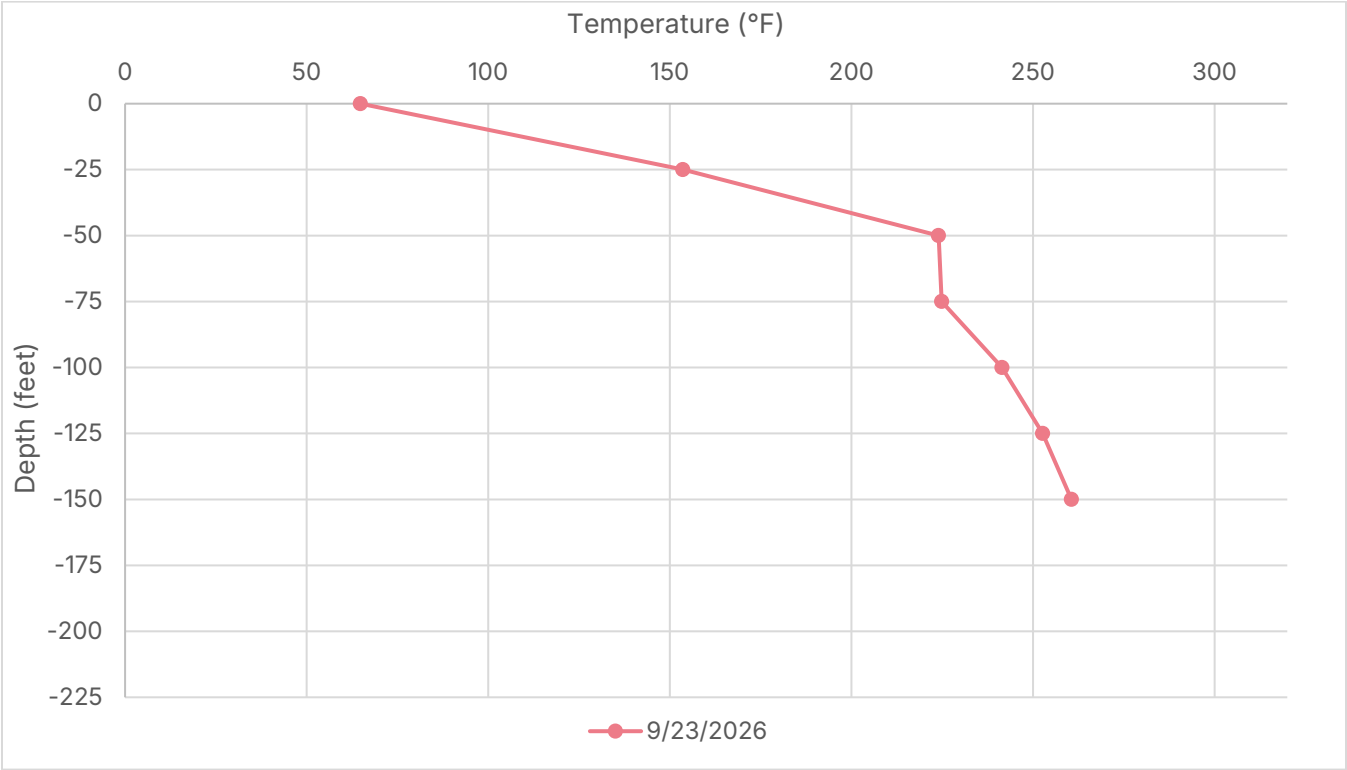


Figure B - 5 Average Temperatures Recorded by TP-1 on September 30, 2026

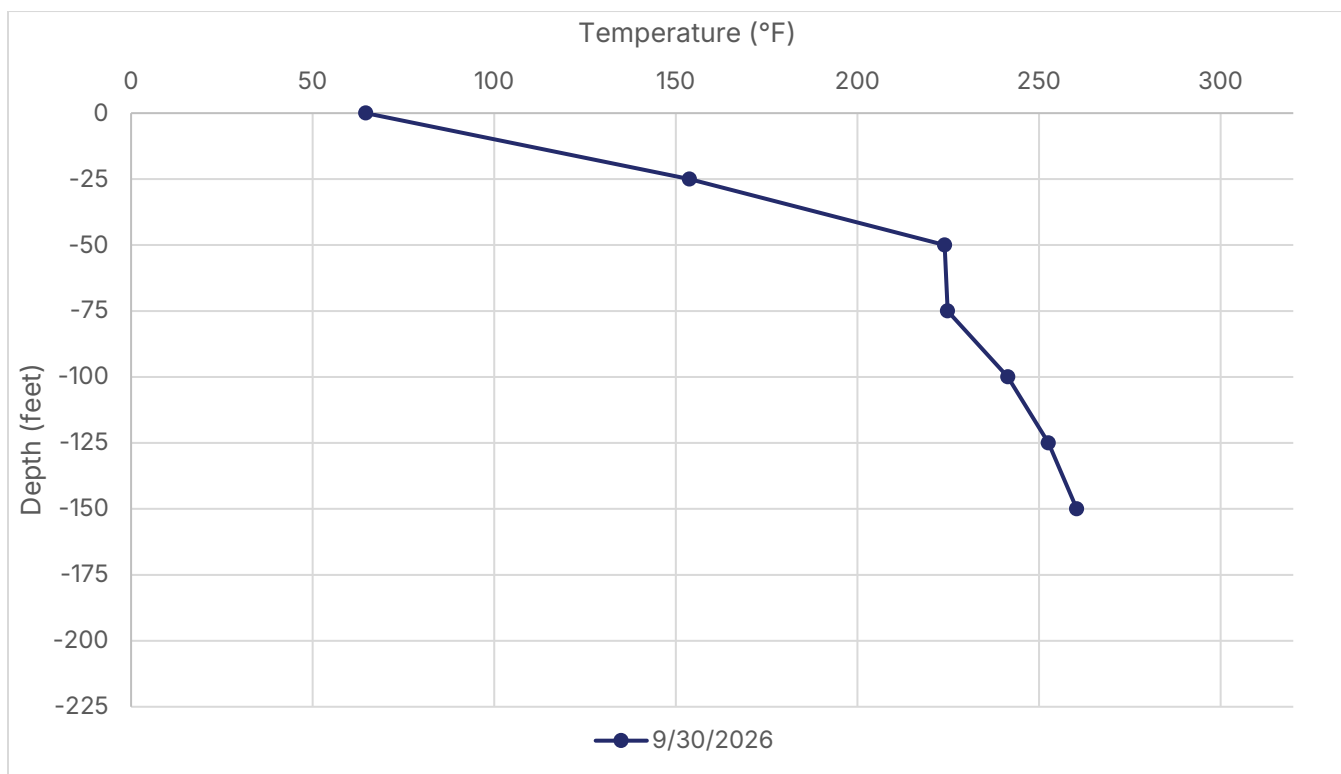


Figure B - 6 Average Temperatures Recorded by TP-5 on September 2, 2026

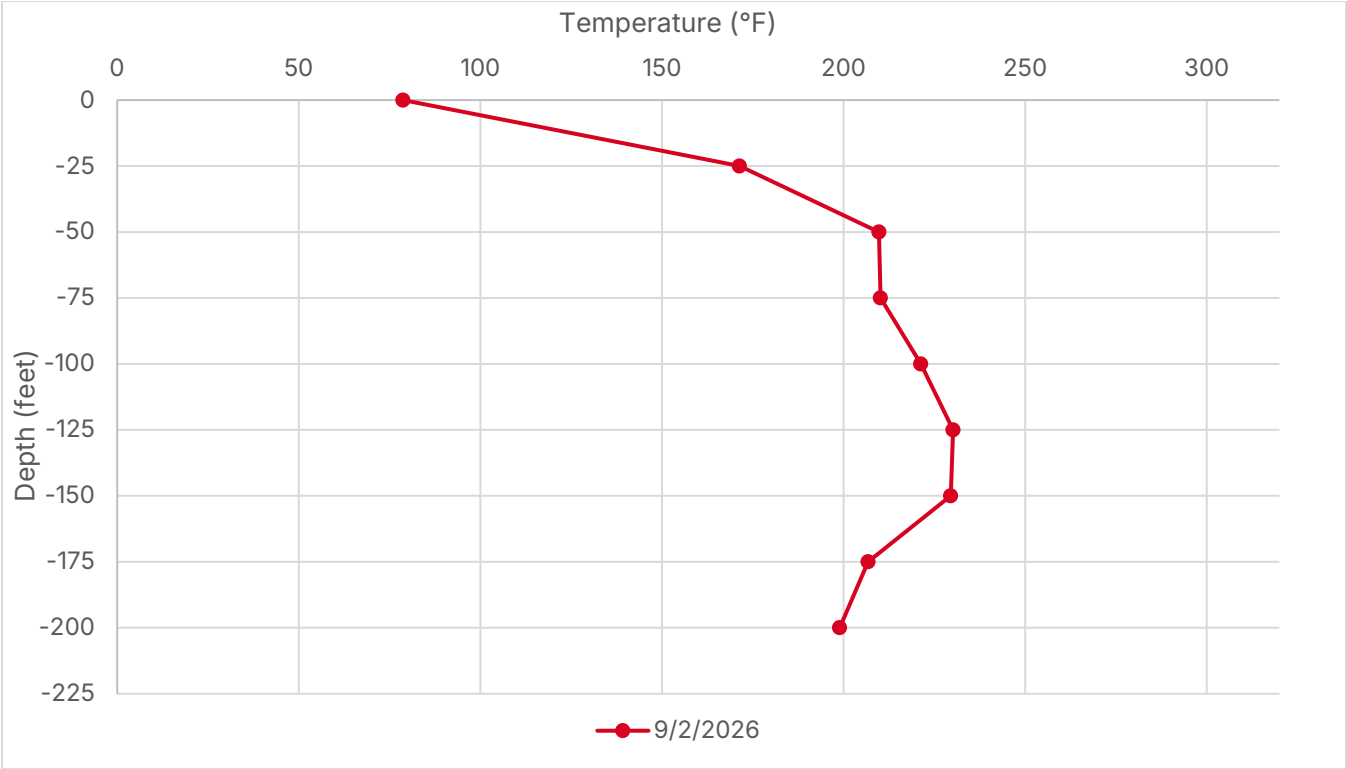


Figure B - 7 Average Temperatures Recorded by TP-5 on September 9, 2026

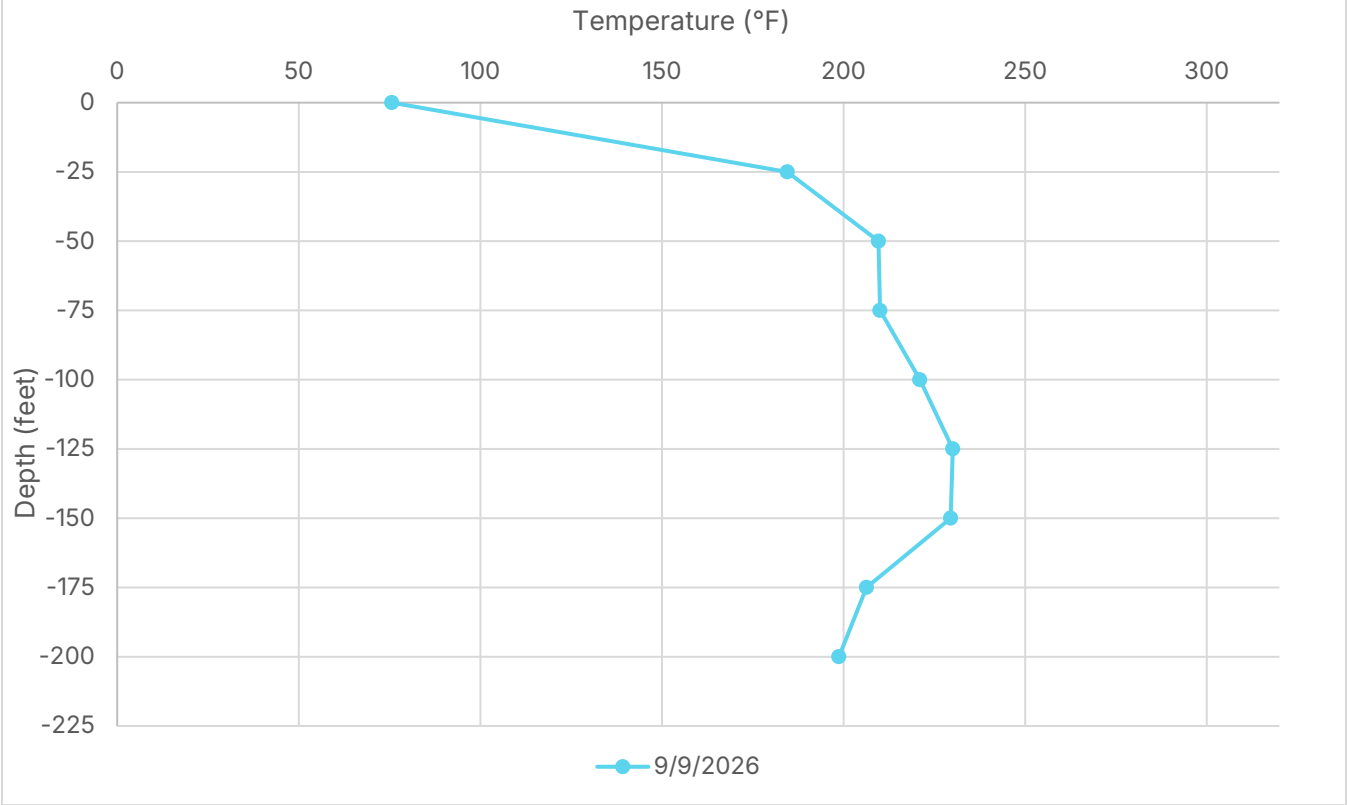


Figure B - 8 Average Temperatures Recorded by TP-5 on September 16, 2026

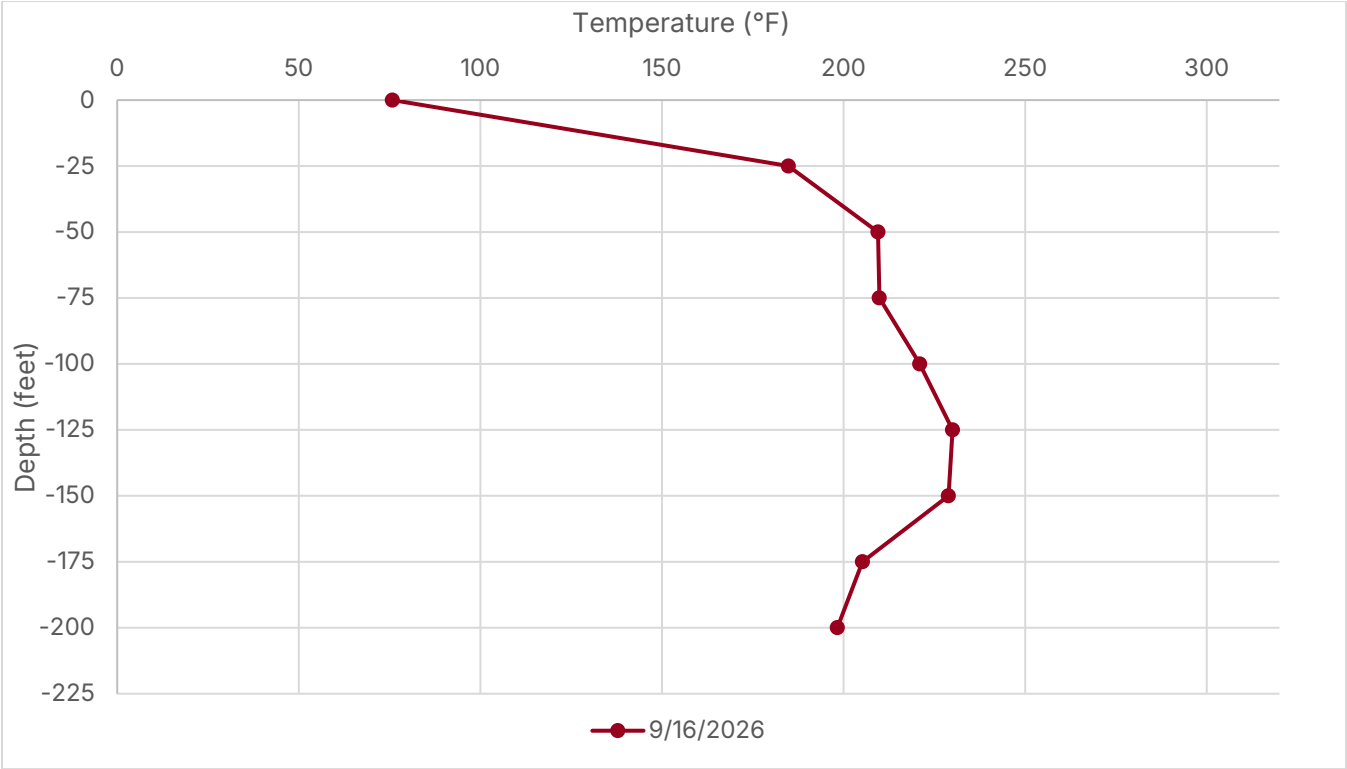


Figure B - 9 Average Temperatures Recorded by TP-5 on September 23, 2026

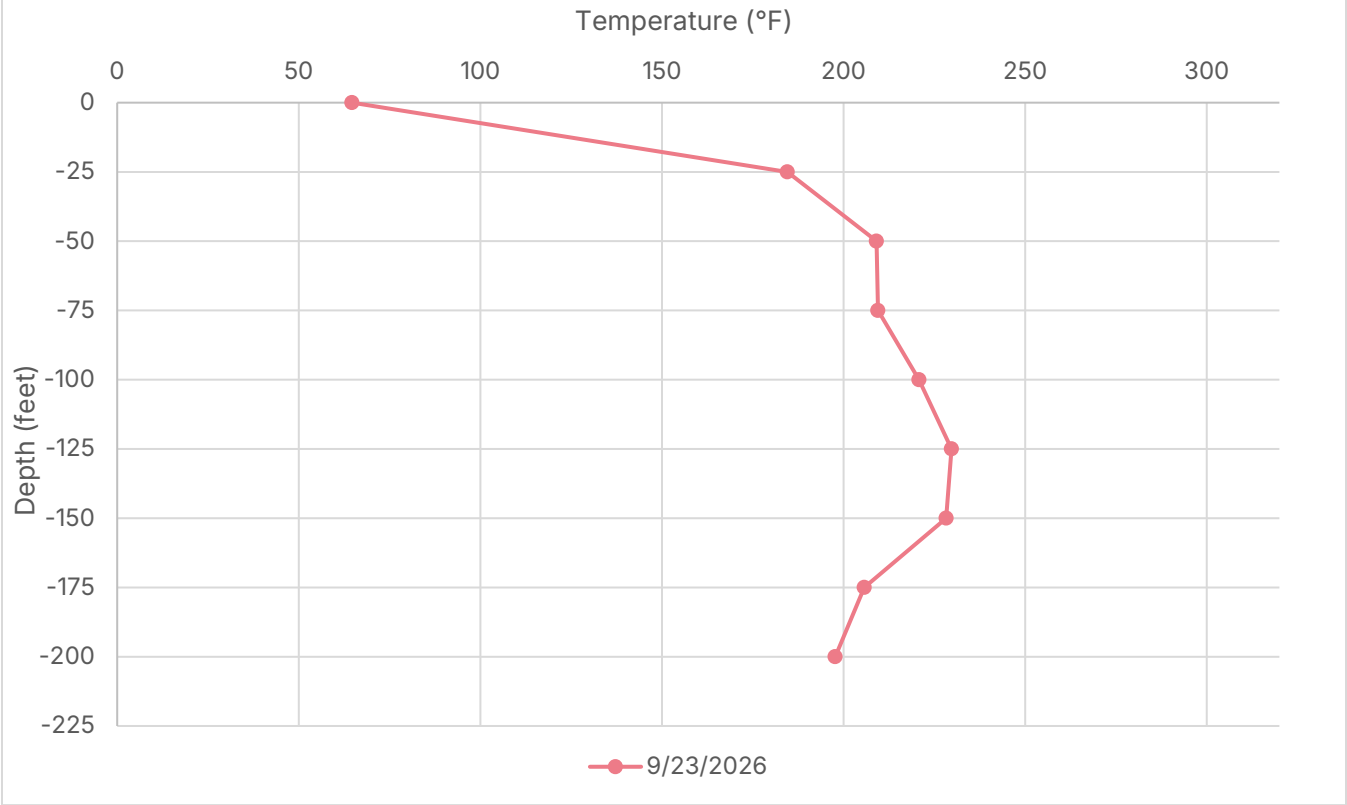


Figure B - 10 Average Temperatures Recorded by TP-5 on September 30, 2026

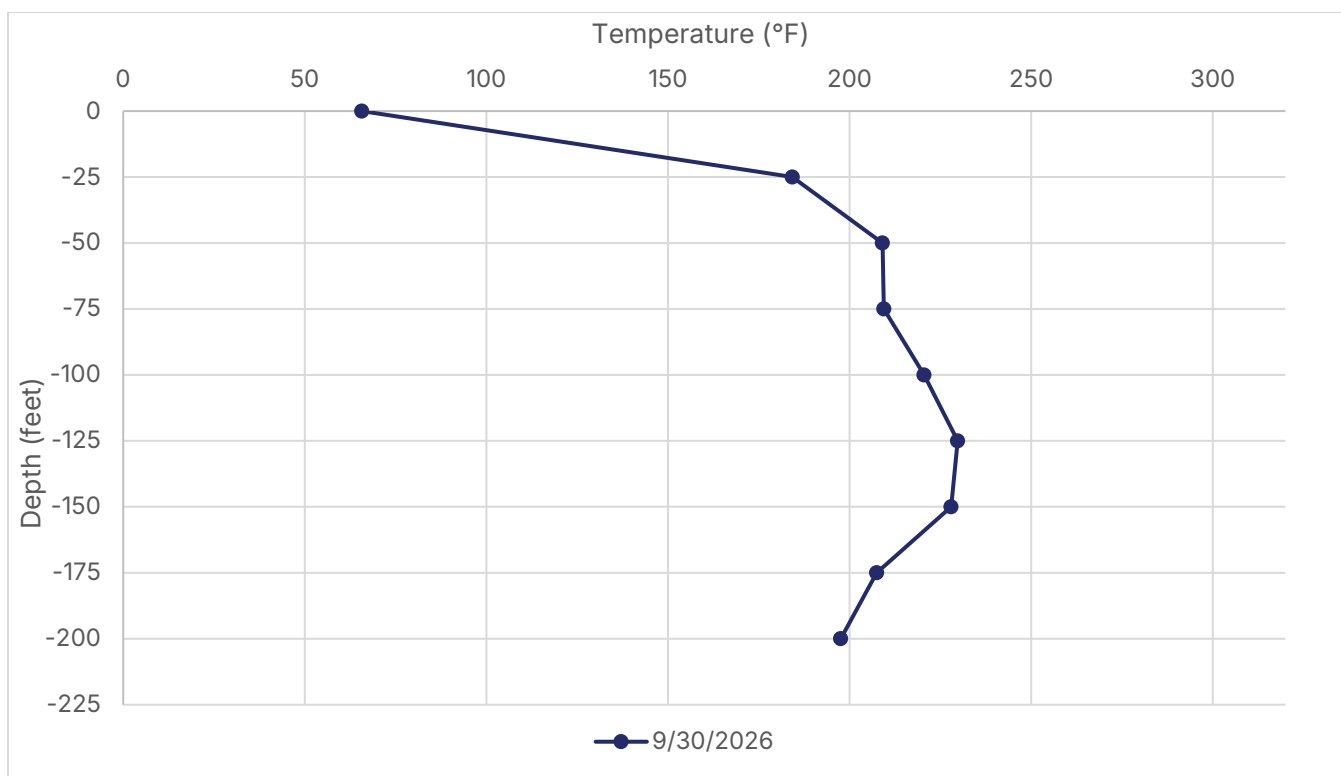


Figure B - 11 Average Temperatures Recorded by TP-8 on September 2, 2026

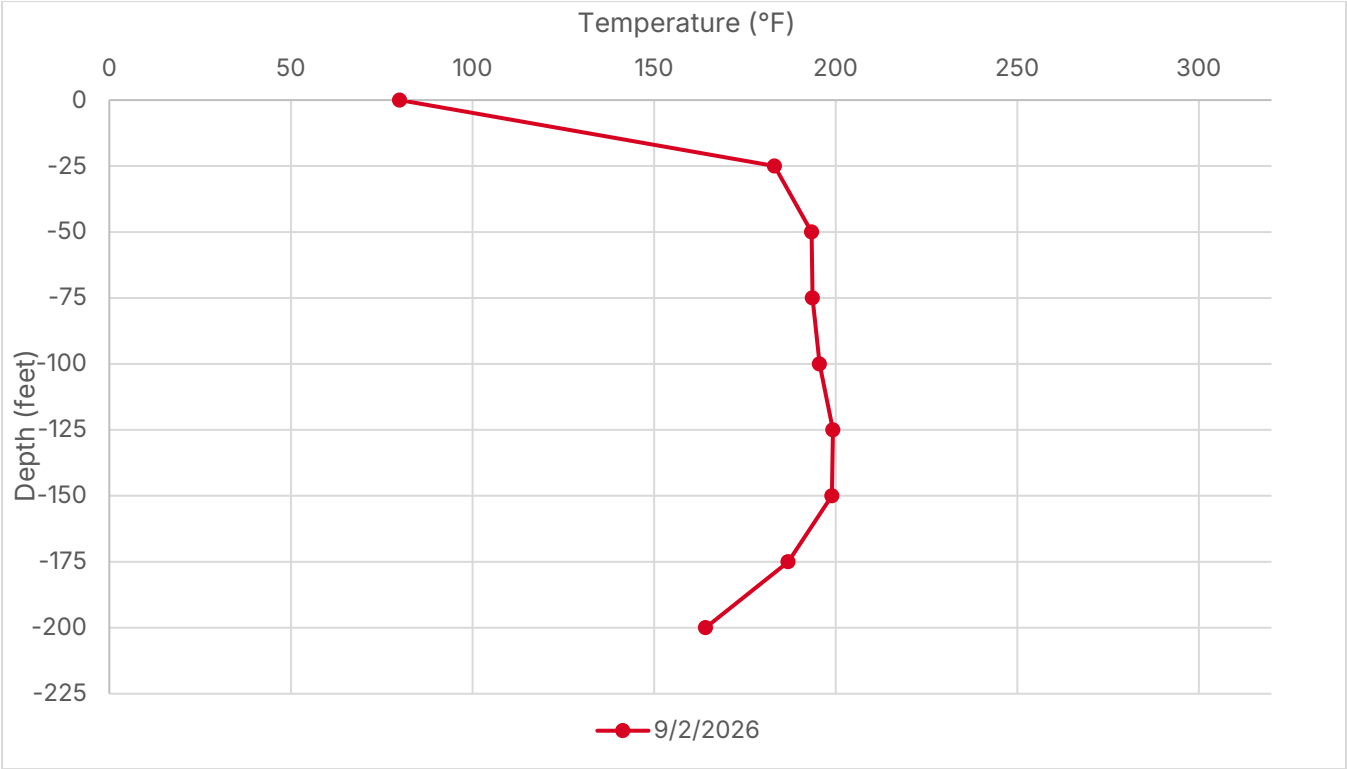


Figure B - 12 Average Temperatures Recorded by TP-8 on September 9, 2026

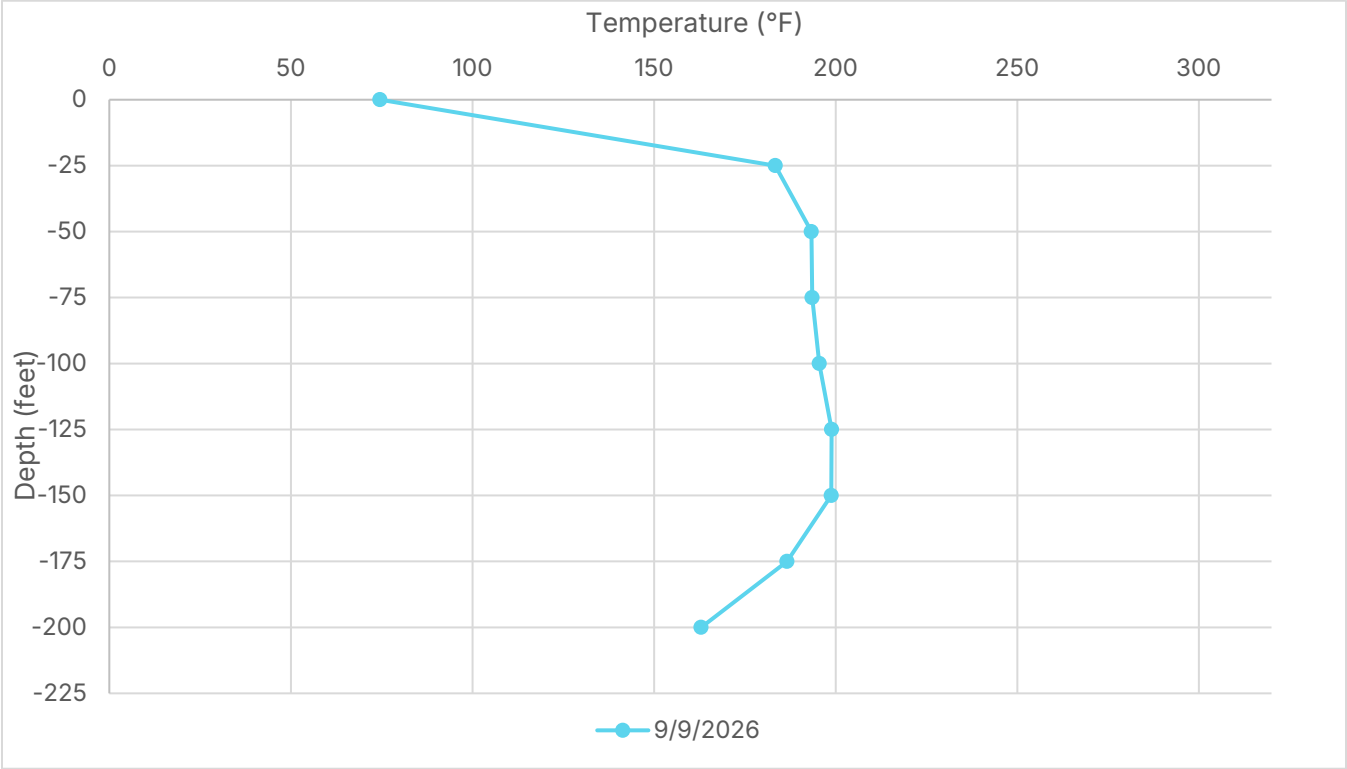


Figure B - 13 Average Temperatures Recorded by TP-8 on September 16, 2026

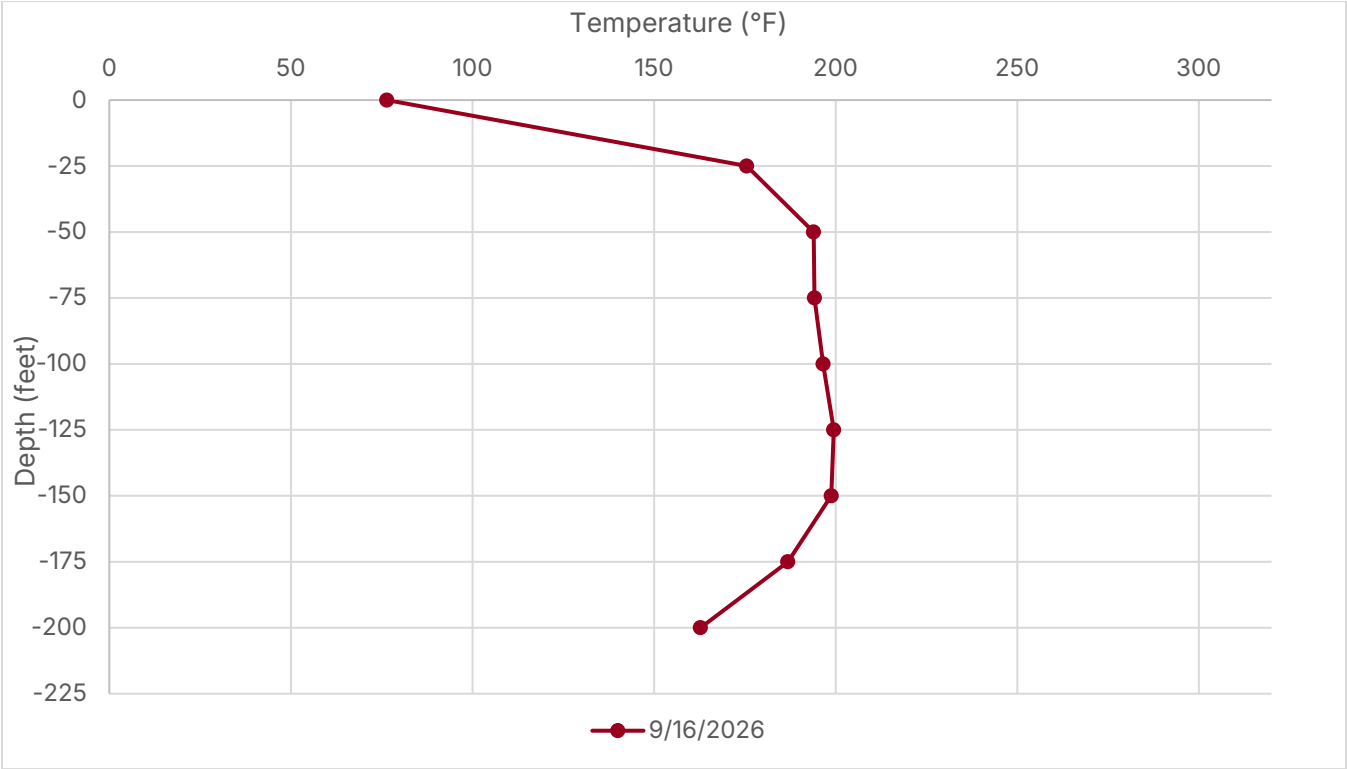


Figure B - 14 Average Temperatures Recorded by TP-8 on September 23, 2026

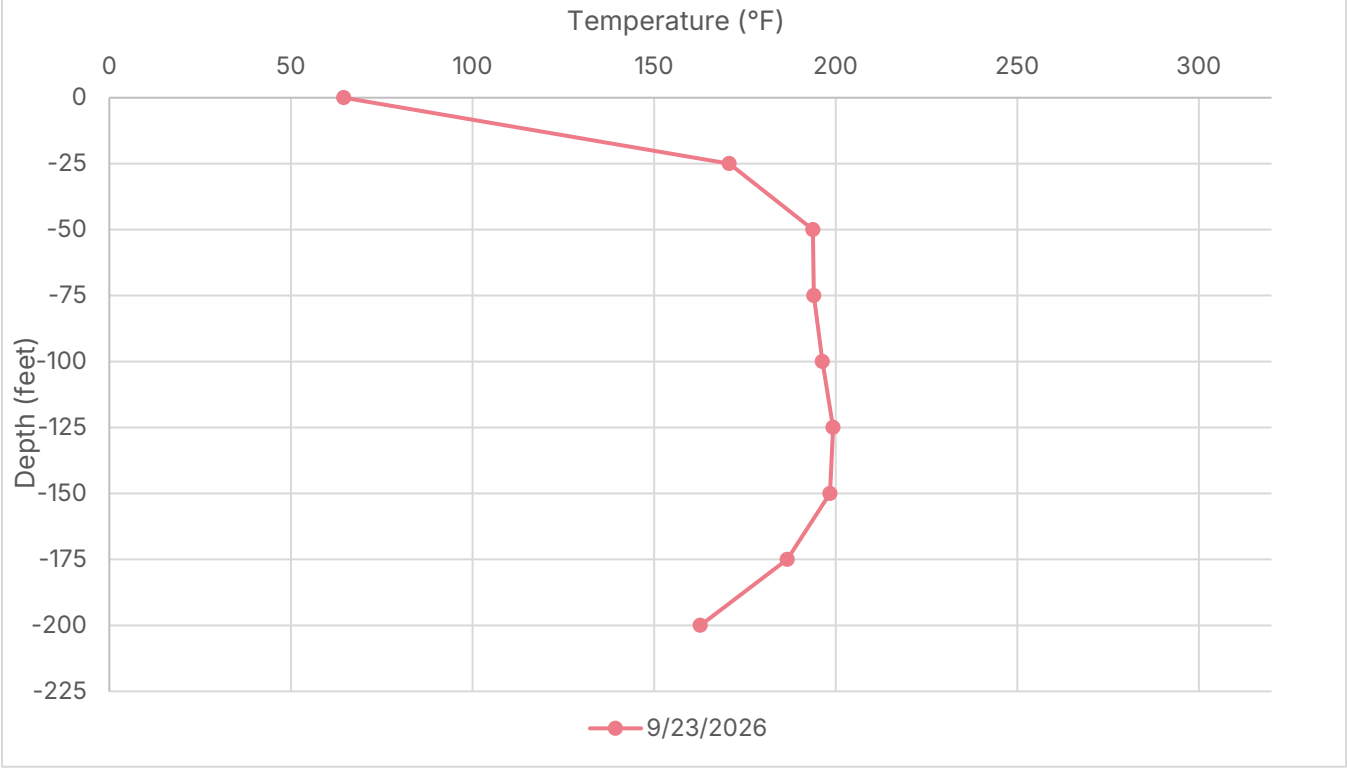


Figure B - 15 Average Temperatures Recorded by TP-8 on September 30, 2026

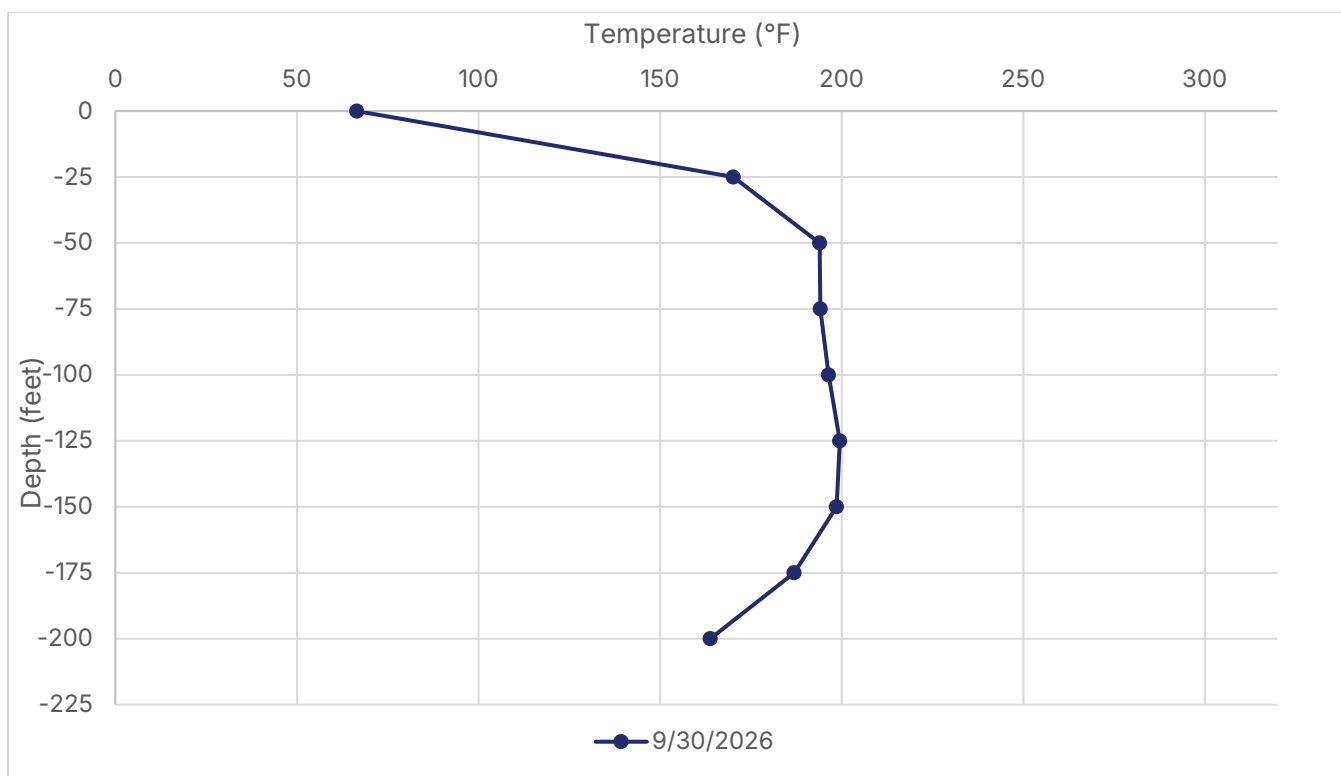


Figure B - 16 Average Temperatures Recorded by TP-9 on September 2, 2026

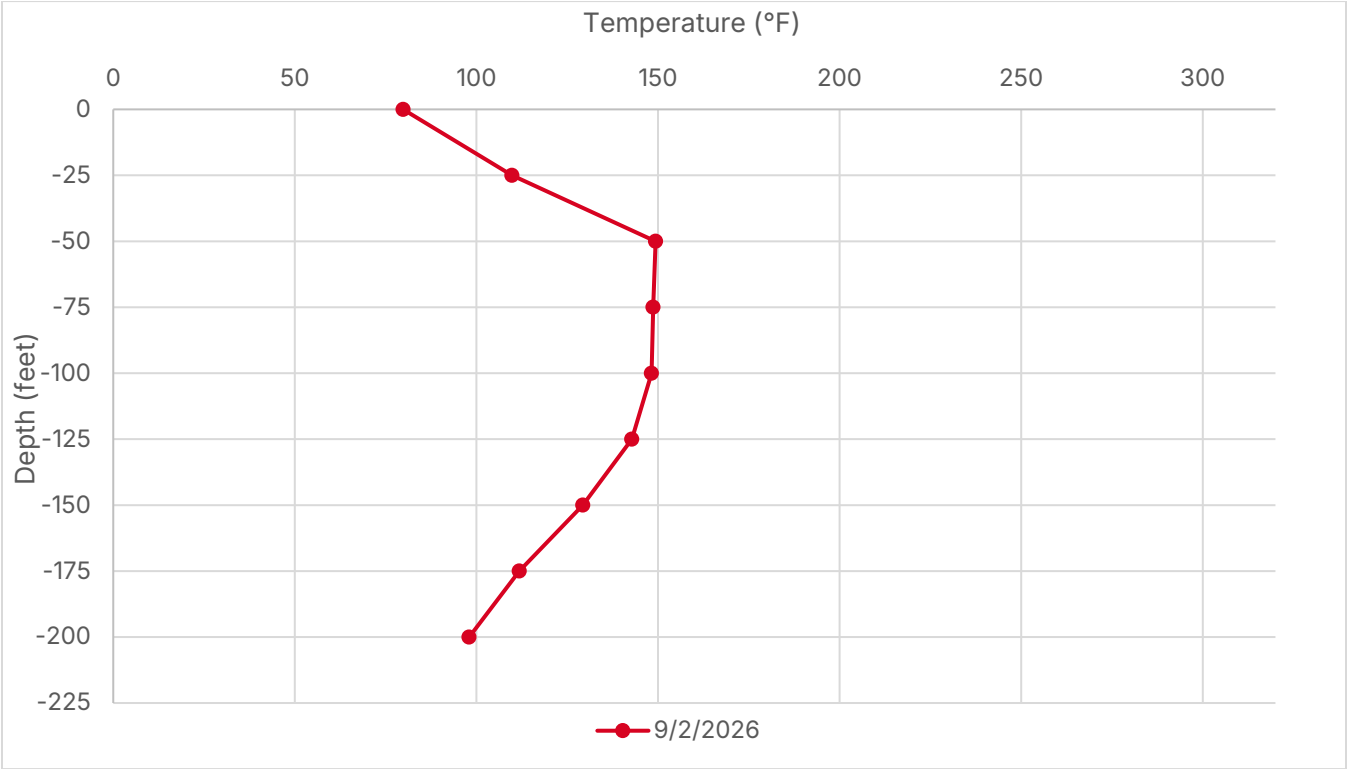


Figure B - 17 Average Temperatures Recorded by TP-9 on September 9, 2026

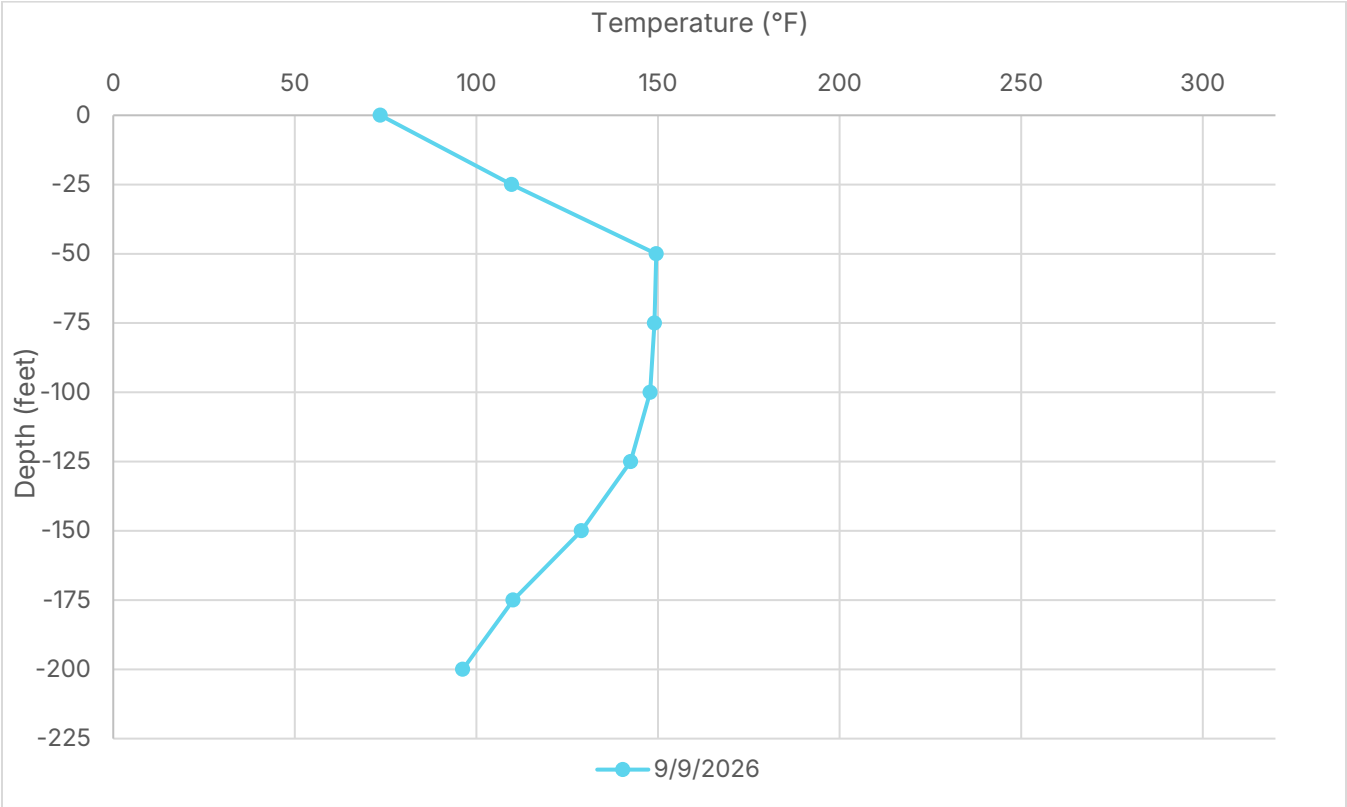


Figure B - 18 Average Temperatures Recorded by TP-9 on September 16, 2026

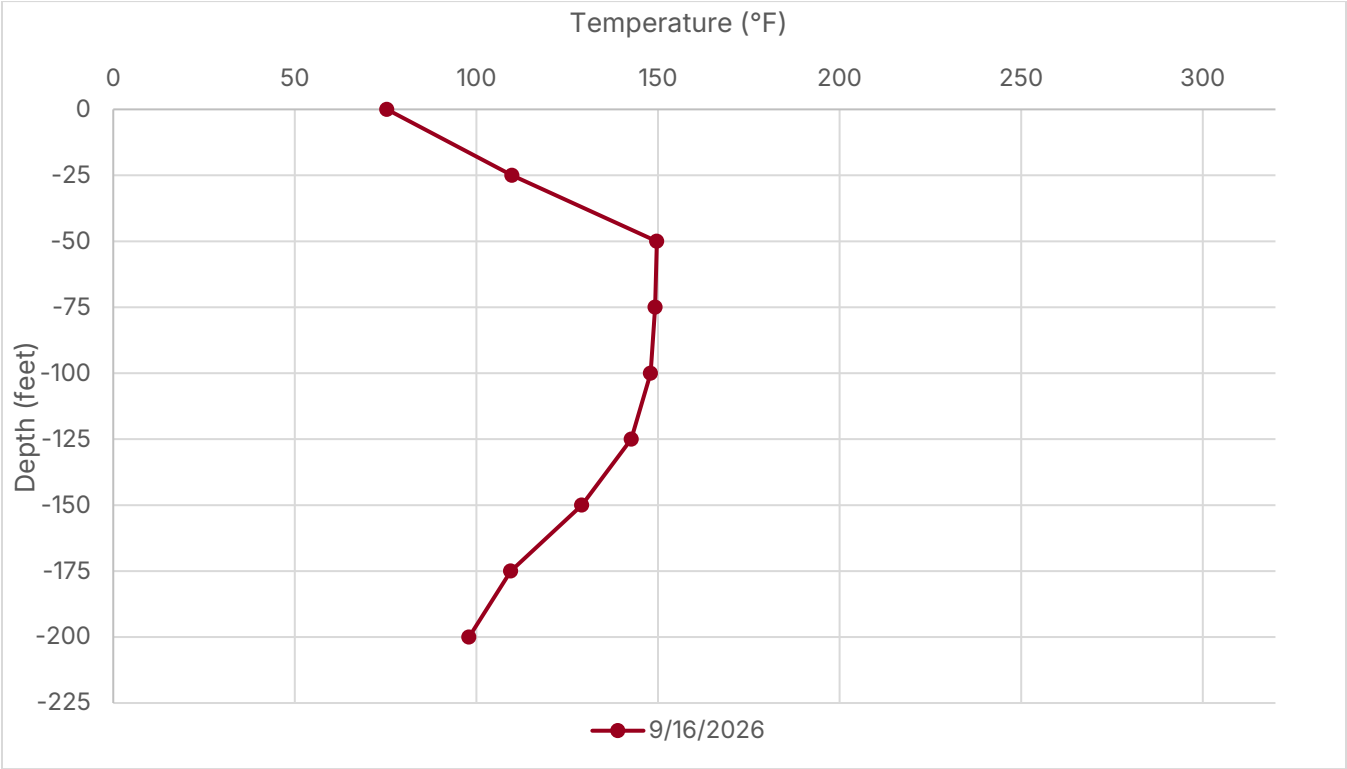


Figure B - 19 Average Temperatures Recorded by TP-9 on September 23, 2026

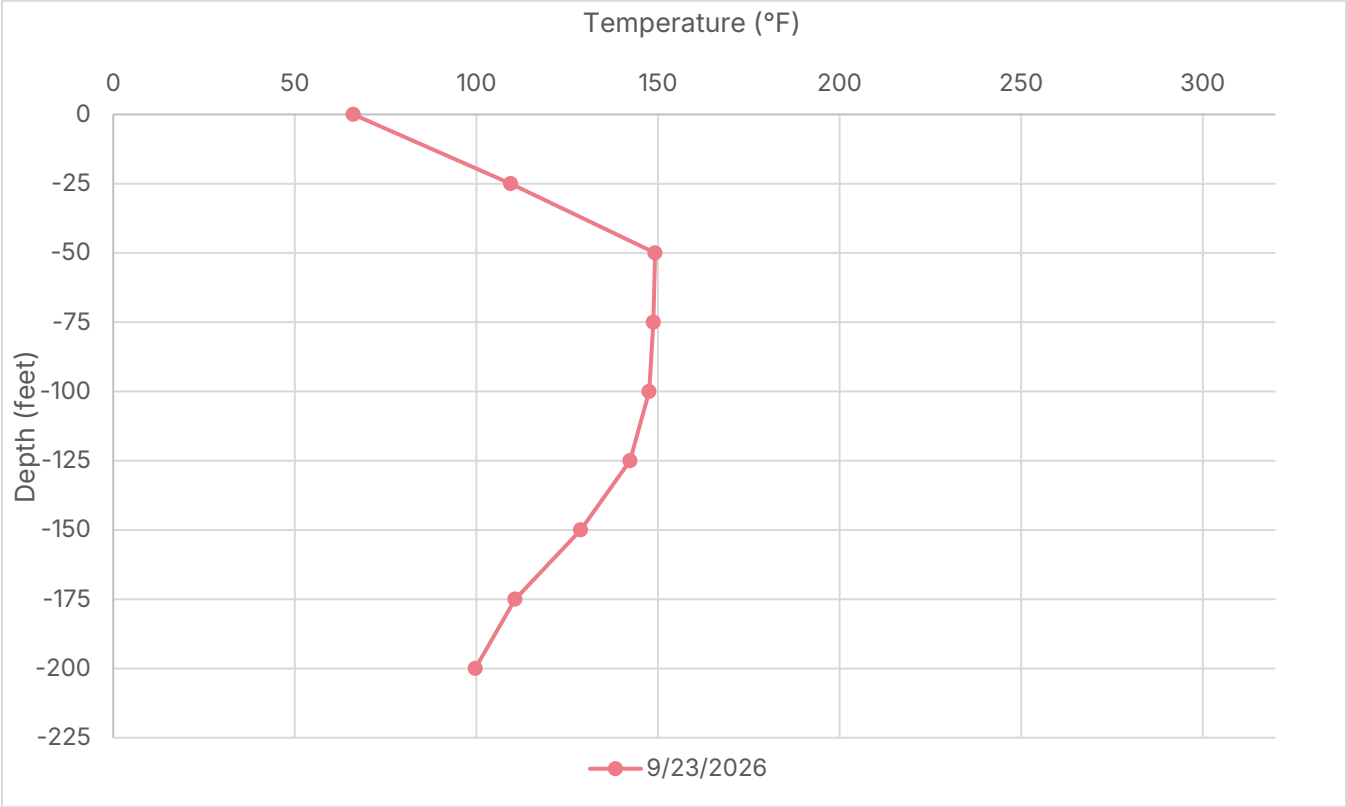
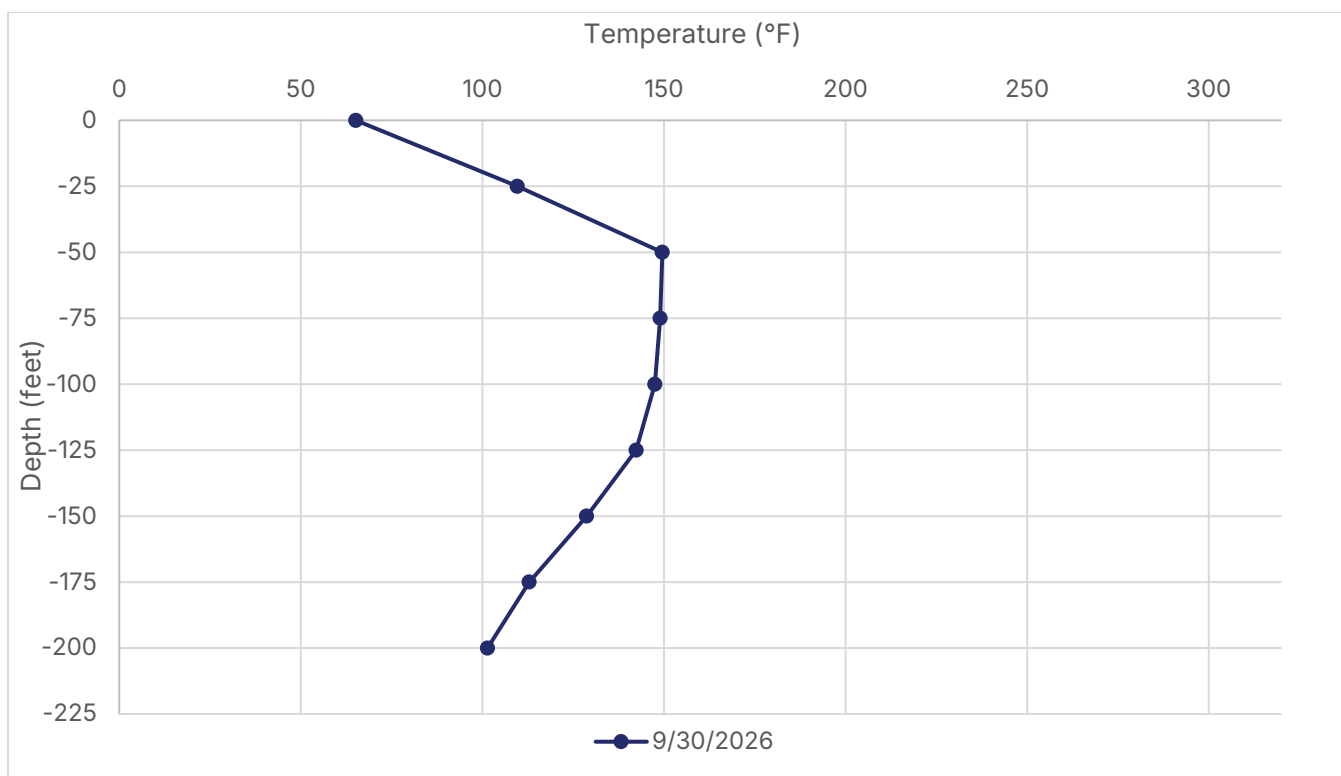


Figure B - 20 Average Temperatures Recorded by TP-9 on September 30, 2026



APPENDIX C | DAILY WELLHEAD TEMPERATURE AVERAGES

Solid Waste Permit 588 Daily Wellhead Temperature Averages

The data provided in this report represent initial readings provided by field instrumentation without Validation, analysis, quality assurance review, or context based on operating conditions. This report is subject to revision following quality assurance review and an analysis of operating conditions. SCS will continue to provide a supplemental report with additional information and further analysis on a monthly basis at a minimum.

SCS ENGINEERS

07222143.00 | October 6, 2026

274 Granite Run Drive
Lancaster, PA 17601
717-550-6330

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 32R

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	93.8	83.9	106.7
Sep 2	94.3	80.3	106.6
Sep 3	94.6	83.5	107.8
Sep 4	92.4	72.8	106.4
Sep 5	77.0	66.9	101.6
Sep 6	81.9	67.5	100.9
Sep 7	89.5	82.2	99.1
Sep 8	90.1	79.5	103.2
Sep 9	91.1	81.6	104.4
Sep 10	90.0	81.5	101.4
Sep 11	91.6	84.2	102.6
Sep 12	87.4	82.4	100.8
Sep 13	88.2	81.6	101.4
Sep 14	87.5	79.3	100.1
Sep 15	87.1	74.9	102.8
Sep 16	88.1	77.2	103.7
Sep 17	88.8	79.9	105.1
Sep 18	86.3	79.5	103.2
Sep 19	78.9	65.8	101.2
Sep 20	78.4	62.7	102.7
Sep 21	85.3	65.9	102.6
Sep 22	84.9	76.2	95.1
Sep 23	79.7	73.2	94.5
Sep 24	76.3	62.6	89.0
Sep 25	77.1	64.1	91.9
Sep 26	77.6	65.7	91.8
Sep 27	77.1	66.1	89.4
Sep 28	80.1	68.0	94.1
Sep 29	83.1	72.5	96.7
Summary	85.5	76.3	94.6

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 33B

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	86.2	68.9	108.1
Sep 2	86.5	69.7	106.7
Sep 3	88.2	69.8	111.1
Sep 4	86.9	71.0	109.5
Sep 5	80.5	69.1	102.8
Sep 6	76.2	68.9	93.4
Sep 7	79.0	68.5	94.0
Sep 8	79.9	63.5	102.4
Sep 9	81.4	64.6	103.4
Sep 10	79.1	64.9	99.4
Sep 11	83.8	71.4	104.6
Sep 12	77.6	70.2	98.0
Sep 13	80.4	70.7	101.0
Sep 14	79.0	66.5	97.5
Sep 15	81.1	65.2	106.1
Sep 16	82.3	65.3	102.8
Sep 17	81.0	67.3	106.4
Sep 18	77.3	68.7	102.2
Sep 19	75.8	67.0	102.6
Sep 20	79.4	64.2	104.4
Sep 21	81.2	67.2	103.5
Sep 22	76.2	65.3	94.1
Sep 23	70.2	61.3	85.9
Sep 24	66.5	57.7	84.9
Sep 25	66.5	51.3	87.4
Sep 26	65.6	49.7	87.4
Sep 27	63.6	47.8	83.7
Sep 28	66.9	49.9	90.5
Sep 29	70.9	53.7	97.7
Summary	77.6	63.6	88.2

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 36A

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	86.2	72.6	107.3
Sep 2	86.6	72.2	108.5
Sep 3	89.0	74.1	114.2
Sep 4	87.5	75.1	110.0
Sep 5	81.1	72.5	99.6
Sep 6	77.9	71.3	91.6
Sep 7	80.1	71.9	91.4
Sep 8	80.7	68.5	100.6
Sep 9	81.9	69.7	100.8
Sep 10	80.8	71.1	98.2
Sep 11	85.1	76.7	99.9
Sep 12	80.4	76.0	94.7
Sep 13	81.9	76.1	97.4
Sep 14	83.0	74.1	96.4
Sep 15	84.5	72.8	104.2
Sep 16	85.5	74.2	101.6
Sep 17	85.6	77.0	103.7
Sep 18	82.4	76.9	99.5
Sep 19	79.5	71.1	99.9
Sep 20	80.3	68.6	103.4
Sep 21	83.2	71.1	101.2
Sep 22	82.6	73.9	93.0
Sep 23	79.3	73.6	89.0
Sep 24	77.4	69.7	90.7
Sep 25	78.1	69.7	90.4
Sep 26	77.9	68.3	89.8
Sep 27	76.0	67.0	87.9
Sep 28	78.2	67.8	93.2
Sep 29	80.7	70.9	98.2
Summary	81.8	76.0	89.0

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 38

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	109.1	107.3	111.5
Sep 2	108.2	81.2	112.0
Sep 3	109.6	107.5	112.2
Sep 4	105.5	83.1	111.9
Sep 5	89.6	80.9	110.2
Sep 6	97.6	77.5	110.6
Sep 7	108.5	107.5	110.0
Sep 8	108.8	106.6	111.9
Sep 9	109.0	107.0	112.0
Sep 10	108.9	106.9	111.5
Sep 11	109.8	108.1	112.3
Sep 12	109.3	107.6	112.0
Sep 13	109.5	108.4	112.4
Sep 14	109.7	108.1	112.4
Sep 15	110.3	107.7	113.6
Sep 16	109.9	98.6	114.0
Sep 17	111.1	108.9	114.3
Sep 18	110.8	109.0	114.0
Sep 19	94.7	77.3	114.1
Sep 20	93.1	77.9	113.4
Sep 21	103.1	79.3	114.6
Sep 22	110.8	108.9	113.4
Sep 23	110.0	108.4	112.7
Sep 24	109.2	106.9	111.7
Sep 25	109.6	107.8	112.3
Sep 26	109.5	107.5	112.2
Sep 27	109.1	107.3	111.8
Sep 28	109.7	107.4	112.8
Sep 29	110.4	108.3	113.9
Summary	107.0	89.6	111.1

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 42

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	140.1	139.3	141.0
Sep 2	138.9	103.5	141.1
Sep 3	140.6	139.9	141.5
Sep 4	132.7	94.2	141.4
Sep 5	107.3	76.9	140.7
Sep 6	124.3	95.2	139.6
Sep 7	138.8	138.2	139.9
Sep 8	139.1	138.4	140.2
Sep 9	139.3	138.7	140.1
Sep 10	139.3	138.7	140.0
Sep 11	139.7	139.1	140.2
Sep 12	139.5	138.9	140.4
Sep 13	139.6	139.0	140.3
Sep 14	139.7	139.3	140.4
Sep 15	140.0	139.2	140.9
Sep 16	137.9	91.8	141.0
Sep 17	140.3	139.8	141.1
Sep 18	140.2	139.8	141.2
Sep 19	112.4	75.3	141.0
Sep 20	115.5	91.9	140.2
Sep 21	127.4	98.5	140.3
Sep 22	139.5	138.8	140.1
Sep 23	139.5	139.1	140.4
Sep 24	139.2	138.7	140.0
Sep 25	137.9	96.5	140.2
Sep 26	139.4	138.7	140.1
Sep 27	139.4	137.2	140.0
Sep 28	139.5	138.7	140.2
Sep 29	138.3	109.2	140.6
Summary	135.3	107.3	140.6

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 47

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	83.1	71.0	102.2
Sep 2	83.4	68.6	106.5
Sep 3	85.6	71.7	109.8
Sep 4	85.0	72.3	105.2
Sep 5	76.6	67.4	98.0
Sep 6	75.8	68.0	94.2
Sep 7	77.8	69.6	91.5
Sep 8	78.6	66.3	98.9
Sep 9	79.6	66.9	99.2
Sep 10	78.7	67.0	95.8
Sep 11	81.8	73.3	97.2
Sep 12	78.5	71.9	94.8
Sep 13	79.0	71.6	97.3
Sep 14	78.0	68.9	93.9
Sep 15	79.5	67.4	99.9
Sep 16	80.6	67.7	100.5
Sep 17	80.7	69.6	102.8
Sep 18	78.3	71.1	97.6
Sep 19	75.9	66.7	97.0
Sep 20	76.2	63.1	98.0
Sep 21	79.8	66.1	99.3
Sep 22	76.7	68.4	91.4
Sep 23	71.6	65.7	81.9
Sep 24	68.4	61.2	81.6
Sep 25	67.6	54.6	85.8
Sep 26	66.4	53.7	83.3
Sep 27	64.0	51.0	80.4
Sep 28	66.6	52.5	86.7
Sep 29	69.7	56.1	90.6
Summary	76.7	64.0	85.6

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 48

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	82.3	66.1	104.2
Sep 2	82.7	67.2	105.1
Sep 3	84.3	67.1	107.4
Sep 4	83.9	68.3	106.6
Sep 5	77.3	67.6	96.9
Sep 6	74.2	67.9	91.7
Sep 7	75.2	65.6	89.1
Sep 8	75.4	60.5	97.4
Sep 9	76.3	62.0	94.5
Sep 10	75.5	62.2	92.3
Sep 11	79.2	69.1	96.1
Sep 12	75.5	67.4	96.7
Sep 13	76.2	67.4	95.3
Sep 14	74.7	64.1	92.1
Sep 15	76.9	61.6	98.6
Sep 16	77.3	62.8	98.3
Sep 17	77.5	64.5	101.0
Sep 18	74.5	66.0	95.7
Sep 19	74.1	66.7	96.5
Sep 20	75.8	63.4	97.8
Sep 21	77.6	65.5	97.1
Sep 22	72.9	64.2	86.7
Sep 23	68.1	60.0	82.6
Sep 24	64.6	56.2	78.1
Sep 25	61.7	47.4	79.8
Sep 26	61.1	46.0	81.7
Sep 27	58.5	43.8	76.6
Sep 28	61.5	46.0	82.5
Sep 29	65.0	49.5	89.4
Summary	73.8	58.5	84.3

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 49

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	156.8	156.1	157.8
Sep 2	155.4	128.3	157.5
Sep 3	156.4	155.9	157.5
Sep 4	155.4	135.4	157.5
Sep 5	161.2	141.6	165.6
Sep 6	160.6	156.7	165.5
Sep 7	156.0	155.2	156.7
Sep 8	155.9	155.1	156.9
Sep 9	156.0	155.3	157.0
Sep 10	156.0	155.5	157.0
Sep 11	155.4	154.8	156.1
Sep 12	154.5	153.7	155.1
Sep 13	154.2	153.4	154.8
Sep 14	154.1	153.3	155.5
Sep 15	154.1	153.3	154.8
Sep 16	153.1	133.8	156.1
Sep 17	153.8	153.1	154.8
Sep 18	153.3	151.4	154.5
Sep 19	146.1	101.7	159.3
Sep 20	153.7	138.2	159.8
Sep 21	155.9	152.8	160.0
Sep 22	153.6	152.7	154.2
Sep 23	152.1	151.4	153.3
Sep 24	151.5	144.8	153.3
Sep 25	150.4	111.9	152.9
Sep 26	152.1	151.6	152.9
Sep 27	152.0	151.6	152.6
Sep 28	152.3	151.7	154.6
Sep 29	152.0	151.3	153.2
Summary	154.3	146.1	161.2

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 50

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	104.6	102.8	109.4
Sep 2	104.8	102.8	109.6
Sep 3	105.2	102.8	111.1
Sep 4	103.3	93.1	108.8
Sep 5	95.2	81.6	107.7
Sep 6	100.3	87.5	108.8
Sep 7	104.1	103.0	105.4
Sep 8	104.0	102.3	106.7
Sep 9	104.1	102.2	106.5
Sep 10	103.9	102.1	105.8
Sep 11	104.5	103.3	106.3
Sep 12	104.0	102.9	105.9
Sep 13	104.0	103.0	106.3
Sep 14	103.0	100.9	106.0
Sep 15	103.9	102.0	107.0
Sep 16	103.8	99.8	106.3
Sep 17	104.0	102.4	106.5
Sep 18	103.6	102.5	105.9
Sep 19	94.9	74.4	107.4
Sep 20	97.0	87.4	109.0
Sep 21	108.4	90.4	122.6
Sep 22	105.6	104.4	107.2
Sep 23	104.1	103.0	105.4
Sep 24	103.3	101.9	105.6
Sep 25	103.3	101.7	105.6
Sep 26	103.2	101.5	105.2
Sep 27	102.8	101.3	104.7
Sep 28	103.0	99.9	105.8
Sep 29	101.8	99.5	103.7
Summary	103.0	94.9	108.4

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 51

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	80.4	66.1	98.0
Sep 2	80.5	67.3	101.2
Sep 3	82.6	67.1	104.5
Sep 4	82.3	68.1	102.7
Sep 5	75.6	67.3	91.2
Sep 6	73.2	67.9	88.5
Sep 7	73.5	65.9	87.1
Sep 8	74.2	61.5	92.2
Sep 9	75.2	61.9	94.0
Sep 10	74.4	61.9	89.3
Sep 11	78.4	68.9	95.1
Sep 12	74.8	68.2	92.7
Sep 13	74.6	67.1	88.8
Sep 14	73.2	63.4	90.7
Sep 15	76.2	63.0	96.7
Sep 16	77.4	63.1	97.3
Sep 17	77.0	64.3	98.4
Sep 18	74.2	65.6	95.5
Sep 19	73.1	65.7	92.9
Sep 20	74.9	62.8	93.5
Sep 21	77.0	65.0	95.4
Sep 22	71.7	63.2	85.6
Sep 23	66.7	61.0	76.9
Sep 24	62.6	55.9	75.3
Sep 25	61.9	48.6	78.8
Sep 26	60.1	46.1	77.7
Sep 27	57.8	43.9	75.3
Sep 28	61.0	46.2	81.9
Sep 29	64.4	50.0	86.3
Summary	72.7	57.8	82.6

Solid Waste Permit 588 Daily Wellhead Temperature
Averages for Well 52
 Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	156.4	155.4	157.2
Sep 2	155.6	154.8	156.5
Sep 3	155.8	154.4	157.8
Sep 4	143.3	73.5	157.6
Sep 5	88.3	67.8	174.4
Sep 6	126.7	68.2	175.8
Sep 7	153.5	62.4	159.5
Sep 8	155.8	154.8	157.0
Sep 9	155.5	154.2	156.6
Sep 10	152.1	76.0	156.6
Sep 11	155.4	154.8	156.2
Sep 12	154.9	154.1	155.7
Sep 13	154.6	153.7	156.0
Sep 14	154.3	153.5	155.1
Sep 15	154.1	153.2	155.3
Sep 16	148.6	91.3	161.0
Sep 17	154.2	153.4	155.4
Sep 18	153.8	152.6	155.0
Sep 19	109.2	66.7	165.7
Sep 20	105.2	63.3	175.6
Sep 21	132.4	66.0	173.9
Sep 22	155.6	154.6	157.1
Sep 23	153.0	134.1	158.0
Sep 24	122.9	61.4	154.0
Sep 25	122.8	51.9	168.5
Sep 26	155.1	154.1	156.1
Sep 27	154.3	153.7	155.1
Sep 28	154.3	153.5	155.6
Sep 29	153.6	145.1	154.9
Summary	144.5	88.3	156.4

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 53

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	178.7	177.4	180.4
Sep 2	178.6	174.4	181.4
Sep 3	178.7	176.6	180.9
Sep 4	177.1	167.0	180.8
Sep 5	173.4	166.3	182.7
Sep 6	177.6	171.7	183.1
Sep 7	177.9	176.5	179.7
Sep 8	177.9	176.2	180.4
Sep 9	178.5	176.6	180.7
Sep 10	178.9	177.4	180.8
Sep 11	179.0	178.1	180.6
Sep 12	178.3	175.5	179.8
Sep 13	178.3	177.3	180.2
Sep 14	178.1	177.0	180.2
Sep 15	177.9	165.9	181.5
Sep 16	178.0	166.5	182.1
Sep 17	179.2	177.7	181.9
Sep 18	178.8	173.9	181.5
Sep 19	173.3	160.9	182.0
Sep 20	175.3	170.7	181.5
Sep 21	179.1	173.1	183.2
Sep 22	179.1	176.9	180.6
Sep 23	177.2	164.6	180.7
Sep 24	176.1	160.1	179.8
Sep 25	177.9	173.1	180.6
Sep 26	178.3	177.0	180.8
Sep 27	178.2	177.0	180.4
Sep 28	178.3	176.8	180.6
Sep 29	178.7	177.1	181.6
Summary	177.8	173.3	179.2

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 54

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	98.7	87.2	115.1
Sep 2	99.1	74.9	118.5
Sep 3	101.0	87.5	119.9
Sep 4	98.2	80.5	117.7
Sep 5	86.4	76.3	106.9
Sep 6	90.4	74.9	111.8
Sep 7	94.1	88.2	105.4
Sep 8	95.7	82.1	112.8
Sep 9	97.1	84.8	113.0
Sep 10	97.4	86.1	112.1
Sep 11	101.8	94.1	116.2
Sep 12	98.2	89.4	112.8
Sep 13	98.8	92.0	110.5
Sep 14	97.3	88.8	111.8
Sep 15	100.2	87.5	120.5
Sep 16	100.7	90.3	118.4
Sep 17	102.0	90.6	121.4
Sep 18	99.8	88.1	117.9
Sep 19	88.4	72.5	122.1
Sep 20	91.1	73.5	117.0
Sep 21	100.0	76.8	121.9
Sep 22	100.0	87.3	114.0
Sep 23	92.0	81.3	102.4
Sep 24	88.4	75.1	103.1
Sep 25	89.4	64.0	108.5
Sep 26	88.4	76.5	105.0
Sep 27	86.0	72.6	103.5
Sep 28	89.5	75.6	111.5
Sep 29	93.9	79.0	115.7
Summary	95.3	86.0	102.0

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 55

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	143.1	138.1	147.3
Sep 2	140.0	114.7	147.3
Sep 3	141.7	138.6	146.1
Sep 4	133.4	97.0	144.1
Sep 5	109.7	94.9	149.8
Sep 6	128.2	94.6	151.9
Sep 7	140.6	136.4	143.3
Sep 8	138.7	135.2	144.1
Sep 9	133.3	127.0	138.2
Sep 10	123.5	117.8	131.1
Sep 11	117.1	113.1	126.8
Sep 12	120.0	112.6	130.6
Sep 13	123.3	118.3	132.7
Sep 14	123.0	118.5	131.7
Sep 15	125.5	118.4	137.4
Sep 16	120.8	91.3	135.1
Sep 17	123.9	117.4	135.4
Sep 18	122.8	109.4	133.4
Sep 19	101.7	71.6	145.8
Sep 20	104.4	77.6	150.1
Sep 21	130.9	87.0	152.7
Sep 22	141.7	137.6	145.7
Sep 23	129.0	114.3	137.5
Sep 24	114.9	86.8	127.1
Sep 25	120.4	109.4	133.4
Sep 26	121.0	113.5	132.5
Sep 27	121.3	115.7	130.0
Sep 28	124.0	117.5	134.1
Sep 29	126.3	117.5	139.1
Summary	125.7	101.7	143.1

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 56

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	169.5	168.2	171.5
Sep 2	169.3	165.1	170.7
Sep 3	169.2	166.9	170.9
Sep 4	169.9	166.3	176.1
Sep 5	177.9	172.8	181.7
Sep 6	176.8	173.0	179.8
Sep 7	171.6	170.3	173.2
Sep 8	171.3	169.7	173.3
Sep 9	171.4	169.8	173.5
Sep 10	172.0	170.7	173.7
Sep 11	172.6	171.4	173.8
Sep 12	172.0	170.5	173.4
Sep 13	172.3	170.9	173.9
Sep 14	172.3	170.2	173.6
Sep 15	170.9	169.1	172.3
Sep 16	169.9	167.9	176.3
Sep 17	169.2	168.2	170.5
Sep 18	169.0	166.7	171.0
Sep 19	172.7	162.8	177.7
Sep 20	178.0	173.6	180.3
Sep 21	175.1	168.6	180.4
Sep 22	169.0	167.5	171.5
Sep 23	167.3	163.7	175.2
Sep 24	166.2	157.2	168.4
Sep 25	167.4	152.3	169.9
Sep 26	168.5	165.7	170.5
Sep 27	169.0	168.0	170.3
Sep 28	169.3	167.7	171.0
Sep 29	169.0	162.9	170.5
Summary	171.0	166.2	178.0

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 57

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	91.0	77.8	110.2
Sep 2	91.9	78.5	114.3
Sep 3	93.2	78.6	114.3
Sep 4	91.9	76.9	112.7
Sep 5	82.3	72.9	99.4
Sep 6	82.3	72.9	103.2
Sep 7	84.0	75.3	100.7
Sep 8	84.8	71.4	104.2
Sep 9	85.7	72.3	105.3
Sep 10	85.4	72.4	102.8
Sep 11	89.1	80.1	105.6
Sep 12	84.8	78.4	101.6
Sep 13	86.3	77.3	102.0
Sep 14	84.5	74.7	102.4
Sep 15	84.5	72.6	104.1
Sep 16	83.5	69.4	105.4
Sep 17	84.0	71.2	106.0
Sep 18	80.8	73.5	102.1
Sep 19	78.6	69.1	101.0
Sep 20	78.4	65.0	98.8
Sep 21	82.8	68.4	102.4
Sep 22	78.8	70.0	92.7
Sep 23	72.4	65.9	83.1
Sep 24	69.0	61.2	83.9
Sep 25	68.4	54.6	88.9
Sep 26	67.2	52.4	88.2
Sep 27	64.8	49.9	85.5
Sep 28	67.7	51.7	90.6
Sep 29	71.3	55.3	96.2
Summary	81.0	64.8	93.2

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 58

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	110.3	109.7	111.3
Sep 2	106.3	38.0	111.4
Sep 3	102.2	40.5	111.7
Sep 4	106.4	83.0	112.0
Sep 5	90.4	81.8	114.8
Sep 6	102.6	82.9	117.4
Sep 7	111.3	110.7	112.0
Sep 8	111.3	110.5	112.5
Sep 9	111.4	110.6	112.5
Sep 10	108.3	36.5	112.3
Sep 11	112.0	111.4	113.0
Sep 12	112.4	111.9	113.4
Sep 13	113.1	112.6	114.2
Sep 14	113.9	113.0	115.1
Sep 15	115.1	113.9	116.4
Sep 16	112.5	38.5	117.8
Sep 17	117.9	116.7	119.1
Sep 18	119.4	118.5	120.5
Sep 19	102.3	80.4	122.2
Sep 20	99.1	83.2	123.7
Sep 21	112.0	85.8	122.9
Sep 22	120.1	119.6	120.7
Sep 23	119.4	113.1	120.5
Sep 24	119.0	94.0	120.8
Sep 25	120.7	120.0	121.6
Sep 26	121.3	120.2	122.3
Sep 27	122.0	121.1	122.9
Sep 28	122.9	121.9	124.1
Sep 29	123.9	122.9	125.0
Summary	112.4	90.4	123.9

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 59

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	112.9	45.7	118.9
Sep 2	115.7	107.8	123.1
Sep 3	116.0	112.8	119.4
Sep 4	109.9	71.5	124.8
Sep 5	79.5	66.8	119.4
Sep 6	97.6	67.5	121.3
Sep 7	114.2	112.2	116.5
Sep 8	115.5	111.5	124.9
Sep 9	115.0	111.7	118.5
Sep 10	117.5	111.7	123.8
Sep 11	115.7	113.9	118.0
Sep 12	114.9	113.3	118.2
Sep 13	115.0	113.4	117.5
Sep 14	115.1	113.3	117.9
Sep 15	116.1	113.8	119.2
Sep 16	115.0	96.5	118.9
Sep 17	115.8	114.0	118.9
Sep 18	112.3	46.1	118.4
Sep 19	92.4	66.5	118.9
Sep 20	85.3	62.5	119.2
Sep 21	102.7	65.7	120.0
Sep 22	113.7	112.1	115.9
Sep 23	111.6	105.5	114.0
Sep 24	110.4	89.1	113.9
Sep 25	111.2	107.5	114.4
Sep 26	111.1	108.5	114.7
Sep 27	110.8	108.3	114.0
Sep 28	110.3	87.7	114.8
Sep 29	111.8	109.2	115.5
Summary	109.8	79.5	117.5

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 60

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	92.1	79.9	107.6
Sep 2	93.1	80.5	110.1
Sep 3	94.5	81.0	112.8
Sep 4	93.0	81.8	110.7
Sep 5	83.6	75.8	101.4
Sep 6	84.9	75.5	102.8
Sep 7	86.1	79.5	95.5
Sep 8	87.0	74.4	104.3
Sep 9	88.9	75.7	105.0
Sep 10	88.8	77.7	104.0
Sep 11	92.9	85.4	106.4
Sep 12	89.3	82.9	104.4
Sep 13	89.3	83.3	103.6
Sep 14	87.1	80.7	101.1
Sep 15	90.4	78.7	108.4
Sep 16	90.4	70.0	110.1
Sep 17	91.1	76.2	111.2
Sep 18	77.8	70.7	100.3
Sep 19	84.2	72.1	110.2
Sep 20	86.9	73.4	108.9
Sep 21	93.9	77.1	112.8
Sep 22	93.6	81.8	106.3
Sep 23	87.7	81.1	98.0
Sep 24	84.8	72.8	99.0
Sep 25	85.0	65.8	101.9
Sep 26	79.3	66.7	93.2
Sep 27	70.2	57.1	87.4
Sep 28	76.2	59.9	100.2
Sep 29	77.9	62.8	101.7
Summary	86.9	70.2	94.5

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 61

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	150.1	146.8	151.6
Sep 2	149.8	145.9	152.9
Sep 3	151.8	150.8	153.7
Sep 4	153.3	148.0	166.6
Sep 5	169.2	129.5	176.4
Sep 6	162.9	152.5	175.5
Sep 7	151.3	150.4	152.4
Sep 8	150.6	149.6	152.1
Sep 9	150.8	149.7	152.2
Sep 10	151.1	150.4	152.2
Sep 11	151.5	150.9	152.6
Sep 12	151.2	150.8	152.1
Sep 13	151.0	150.4	152.4
Sep 14	150.0	148.1	151.1
Sep 15	150.1	149.5	151.1
Sep 16	149.7	125.0	157.4
Sep 17	150.0	149.1	151.5
Sep 18	150.0	149.3	151.4
Sep 19	153.3	112.3	166.7
Sep 20	163.9	138.0	172.2
Sep 21	158.0	150.5	171.2
Sep 22	150.0	149.0	151.0
Sep 23	148.7	147.8	149.7
Sep 24	147.1	120.5	149.4
Sep 25	148.6	147.8	149.5
Sep 26	148.8	148.0	149.9
Sep 27	148.8	148.1	149.8
Sep 28	148.9	147.5	150.3
Sep 29	147.0	137.1	148.6
Summary	152.0	147.0	169.2

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 62

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	100.3	92.1	107.2
Sep 2	97.8	85.4	109.8
Sep 3	98.7	89.9	109.6
Sep 4	95.3	73.6	108.9
Sep 5	78.9	68.0	100.5
Sep 6	85.4	68.3	104.3
Sep 7	93.5	86.9	102.5
Sep 8	93.2	84.7	105.5
Sep 9	93.8	84.7	104.8
Sep 10	92.8	84.6	103.0
Sep 11	94.4	87.8	105.3
Sep 12	90.4	86.3	102.1
Sep 13	91.3	86.1	103.5
Sep 14	90.8	83.3	102.6
Sep 15	98.4	82.3	111.1
Sep 16	103.4	91.9	111.5
Sep 17	103.9	100.2	111.6
Sep 18	102.4	97.8	110.7
Sep 19	87.3	68.6	110.8
Sep 20	84.2	65.5	111.4
Sep 21	95.1	68.3	111.9
Sep 22	102.1	97.5	108.0
Sep 23	99.2	95.4	105.9
Sep 24	96.7	91.1	104.5
Sep 25	95.7	71.4	105.4
Sep 26	95.7	88.9	104.1
Sep 27	95.5	90.4	102.6
Sep 28	97.5	90.4	106.7
Sep 29	99.3	93.7	108.6
Summary	94.9	78.9	103.9

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 63

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	80.6	66.1	102.5
Sep 2	81.6	67.3	101.9
Sep 3	82.1	66.9	104.5
Sep 4	82.6	68.2	103.9
Sep 5	75.6	67.3	91.6
Sep 6	74.1	68.1	88.6
Sep 7	75.4	65.7	92.1
Sep 8	74.5	59.9	97.1
Sep 9	75.6	61.8	96.0
Sep 10	75.8	61.9	91.0
Sep 11	78.5	69.1	98.5
Sep 12	74.8	67.5	94.8
Sep 13	76.2	67.4	92.7
Sep 14	74.7	62.9	95.5
Sep 15	76.6	61.4	100.0
Sep 16	77.4	62.2	100.2
Sep 17	76.7	64.3	100.1
Sep 18	73.4	65.9	99.6
Sep 19	74.8	66.0	98.1
Sep 20	75.8	62.9	98.6
Sep 21	78.0	65.2	98.2
Sep 22	72.5	63.7	88.1
Sep 23	68.7	59.9	89.4
Sep 24	64.9	55.6	79.7
Sep 25	61.7	47.1	83.7
Sep 26	60.7	46.1	82.0
Sep 27	58.7	44.0	78.8
Sep 28	62.2	46.3	84.7
Sep 29	65.7	49.8	92.3
Summary	73.4	58.7	82.6

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 64

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	81.6	65.4	107.8
Sep 2	82.5	66.7	108.9
Sep 3	84.0	66.2	111.0
Sep 4	83.5	67.6	110.7
Sep 5	76.3	66.8	99.2
Sep 6	73.9	67.5	97.0
Sep 7	76.0	64.6	97.9
Sep 8	75.4	59.1	101.7
Sep 9	76.5	61.0	99.4
Sep 10	75.4	61.4	94.3
Sep 11	80.3	68.7	103.8
Sep 12	75.2	66.9	98.9
Sep 13	76.9	66.5	98.7
Sep 14	75.6	63.7	99.2
Sep 15	76.8	61.1	102.6
Sep 16	77.7	61.9	103.1
Sep 17	77.0	64.3	102.6
Sep 18	71.6	26.6	99.4
Sep 19	74.1	66.1	100.0
Sep 20	76.0	63.2	97.6
Sep 21	78.5	65.0	101.3
Sep 22	73.0	63.1	89.6
Sep 23	67.8	60.0	86.5
Sep 24	64.9	55.3	84.8
Sep 25	62.6	46.6	84.7
Sep 26	61.5	45.5	84.6
Sep 27	59.2	43.3	80.7
Sep 28	62.3	45.2	88.0
Sep 29	66.0	49.5	92.3
Summary	73.9	59.2	84.0

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 65

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	138.2	129.1	145.1
Sep 2	140.1	121.3	143.3
Sep 3	136.9	133.4	140.2
Sep 4	125.3	76.0	136.5
Sep 5	82.0	69.1	131.1
Sep 6	108.6	69.4	138.2
Sep 7	131.7	126.3	135.8
Sep 8	125.1	120.8	130.4
Sep 9	123.1	117.0	128.9
Sep 10	125.5	121.6	130.0
Sep 11	128.1	125.0	131.9
Sep 12	126.5	121.9	131.3
Sep 13	125.8	123.4	130.9
Sep 14	125.4	122.2	129.7
Sep 15	125.8	120.0	132.4
Sep 16	123.3	95.5	131.7
Sep 17	126.1	121.7	132.3
Sep 18	125.3	117.6	131.2
Sep 19	97.8	68.3	131.6
Sep 20	90.9	64.3	133.7
Sep 21	117.9	68.4	141.7
Sep 22	134.2	130.1	137.1
Sep 23	122.8	116.6	130.4
Sep 24	114.4	73.6	122.0
Sep 25	118.1	106.1	125.2
Sep 26	119.5	114.3	125.9
Sep 27	118.9	114.1	124.3
Sep 28	120.5	114.5	126.9
Sep 29	122.4	116.9	129.8
Summary	121.4	82.0	140.1

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 66

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	192.2	191.3	193.2
Sep 2	192.6	191.9	193.4
Sep 3	192.9	192.4	193.9
Sep 4	189.1	178.1	196.7
Sep 5	196.4	191.1	197.6
Sep 6	195.3	193.1	197.6
Sep 7	192.8	192.1	193.3
Sep 8	192.5	191.8	193.8
Sep 9	192.2	182.6	194.4
Sep 10	193.5	193.1	194.1
Sep 11	187.6	180.3	193.5
Sep 12	177.3	175.5	180.1
Sep 13	174.4	172.7	176.0
Sep 14	179.0	171.8	191.5
Sep 15	192.1	191.6	192.9
Sep 16	192.3	189.4	195.8
Sep 17	192.2	191.8	192.8
Sep 18	179.4	175.7	192.0
Sep 19	166.0	133.4	180.4
Sep 20	170.2	158.6	181.4
Sep 21	182.5	162.0	192.7
Sep 22	185.5	176.5	192.1
Sep 23	184.9	173.7	192.7
Sep 24	184.7	175.5	191.9
Sep 25	180.6	173.0	191.4
Sep 26	172.8	170.4	174.3
Sep 27	170.2	168.7	171.6
Sep 28	169.1	167.1	174.0
Sep 29	167.0	165.4	168.9
Summary	184.0	166.0	196.4

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 67

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	197.2	196.8	197.6
Sep 2	197.4	197.2	199.1
Sep 3	197.2	196.1	197.6
Sep 4	197.5	196.8	199.7
Sep 5	199.6	197.6	199.8
Sep 6	195.5	189.7	199.8
Sep 7	187.2	185.7	189.6
Sep 8	184.8	184.0	185.7
Sep 9	181.4	175.2	183.9
Sep 10	177.4	174.1	179.8
Sep 11	177.4	176.3	178.7
Sep 12	176.2	174.5	177.3
Sep 13	175.6	174.5	177.2
Sep 14	176.9	172.2	183.6
Sep 15	182.4	180.9	183.8
Sep 16	178.4	167.3	181.6
Sep 17	174.6	173.0	176.7
Sep 18	173.2	171.4	175.4
Sep 19	170.9	130.2	180.2
Sep 20	181.3	175.8	184.4
Sep 21	178.2	172.6	184.1
Sep 22	167.3	145.1	173.4
Sep 23	167.3	142.2	183.6
Sep 24	170.6	169.3	172.5
Sep 25	168.4	129.6	172.8
Sep 26	170.1	169.2	172.4
Sep 27	169.6	168.6	171.2
Sep 28	169.6	168.2	171.7
Sep 29	169.6	168.6	171.8
Summary	179.8	167.3	199.6

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 68

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	150.5	149.7	151.3
Sep 2	149.8	148.7	151.0
Sep 3	149.3	148.1	150.5
Sep 4	140.9	81.8	150.8
Sep 5	105.5	77.8	159.5
Sep 6	133.0	82.3	163.8
Sep 7	150.5	148.5	152.8
Sep 8	149.6	148.0	150.8
Sep 9	148.9	148.0	150.5
Sep 10	148.6	147.3	149.9
Sep 11	148.7	147.8	149.7
Sep 12	148.1	145.9	149.1
Sep 13	147.8	146.5	149.0
Sep 14	147.5	146.7	148.3
Sep 15	147.3	145.3	149.3
Sep 16	142.4	93.9	151.4
Sep 17	147.6	146.0	149.0
Sep 18	146.7	145.1	148.2
Sep 19	121.3	71.6	155.9
Sep 20	120.9	89.9	160.3
Sep 21	142.2	99.1	161.6
Sep 22	147.7	121.4	150.4
Sep 23	142.9	89.2	150.3
Sep 24	145.9	144.3	148.1
Sep 25	144.3	89.2	148.6
Sep 26	146.2	144.4	147.5
Sep 27	146.3	145.4	147.3
Sep 28	146.3	144.8	147.7
Sep 29	146.4	144.7	148.2
Summary	143.2	105.5	150.5

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 69

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	97.4	88.5	110.9
Sep 2	98.0	85.8	112.8
Sep 3	99.2	87.8	114.6
Sep 4	95.2	73.6	112.4
Sep 5	78.5	67.2	101.2
Sep 6	82.9	68.0	102.3
Sep 7	92.0	85.5	103.0
Sep 8	92.4	83.0	105.4
Sep 9	93.3	84.4	108.0
Sep 10	91.4	83.9	101.4
Sep 11	93.7	86.6	108.2
Sep 12	90.1	85.4	103.8
Sep 13	90.6	85.2	105.0
Sep 14	90.1	82.1	104.6
Sep 15	94.9	78.4	112.2
Sep 16	106.2	99.0	112.8
Sep 17	107.6	104.6	113.6
Sep 18	106.8	104.0	113.2
Sep 19	88.9	67.7	111.4
Sep 20	83.4	63.5	110.6
Sep 21	95.4	66.6	110.6
Sep 22	103.3	100.4	107.6
Sep 23	101.0	97.5	106.3
Sep 24	97.5	84.1	104.2
Sep 25	97.3	91.7	105.5
Sep 26	96.6	91.9	104.3
Sep 27	94.9	90.2	103.0
Sep 28	94.9	87.7	105.2
Sep 29	95.9	90.4	105.5
Summary	94.8	78.5	107.6

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 70

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	83.8	66.2	115.1
Sep 2	86.1	67.2	116.0
Sep 3	86.0	66.8	114.6
Sep 4	85.4	68.2	116.9
Sep 5	77.7	66.8	103.7
Sep 6	75.9	67.5	98.8
Sep 7	78.2	63.9	103.1
Sep 8	77.0	59.5	104.3
Sep 9	78.5	61.4	103.9
Sep 10	76.8	62.0	98.7
Sep 11	82.0	68.9	105.7
Sep 12	76.2	66.9	104.4
Sep 13	78.8	66.7	100.2
Sep 14	77.6	62.3	104.0
Sep 15	78.6	60.5	109.8
Sep 16	83.0	66.8	109.8
Sep 17	81.7	69.1	109.8
Sep 18	77.1	67.1	107.6
Sep 19	77.7	66.7	104.9
Sep 20	77.8	62.7	107.4
Sep 21	80.4	65.7	106.2
Sep 22	75.1	66.0	91.4
Sep 23	71.0	61.2	93.9
Sep 24	68.5	57.5	87.5
Sep 25	65.6	48.6	94.8
Sep 26	64.8	47.9	93.9
Sep 27	63.0	46.2	92.4
Sep 28	65.5	48.1	95.0
Sep 29	68.4	51.0	97.6
Summary	76.5	63.0	86.1

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 71

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	138.4	136.2	140.5
Sep 2	136.0	121.6	138.2
Sep 3	136.9	135.5	138.9
Sep 4	130.8	91.9	138.7
Sep 5	100.6	89.7	136.0
Sep 6	115.9	84.0	136.4
Sep 7	135.6	133.8	137.4
Sep 8	136.4	135.2	138.5
Sep 9	136.3	135.1	137.6
Sep 10	136.1	135.2	137.3
Sep 11	136.2	134.9	137.8
Sep 12	135.7	133.5	137.1
Sep 13	136.0	134.5	138.1
Sep 14	135.8	134.8	137.5
Sep 15	135.3	132.8	138.0
Sep 16	134.5	117.4	137.6
Sep 17	136.1	134.8	137.6
Sep 18	135.2	129.4	137.0
Sep 19	108.9	80.3	137.3
Sep 20	107.4	84.0	137.6
Sep 21	122.9	88.6	137.6
Sep 22	135.0	132.6	136.8
Sep 23	132.9	130.1	135.8
Sep 24	131.8	128.5	134.5
Sep 25	133.3	129.8	135.6
Sep 26	134.1	132.4	135.8
Sep 27	134.1	132.5	135.0
Sep 28	134.7	133.4	136.4
Sep 29	135.2	134.3	136.9
Summary	131.0	100.6	138.4

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 72

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	142.1	141.3	143.1
Sep 2	142.3	136.8	143.6
Sep 3	142.5	141.6	143.9
Sep 4	136.7	95.5	143.9
Sep 5	121.3	94.4	143.8
Sep 6	134.1	119.1	142.4
Sep 7	141.9	140.9	143.1
Sep 8	142.8	141.8	143.6
Sep 9	143.1	142.4	143.9
Sep 10	143.1	142.6	143.7
Sep 11	143.3	142.7	144.4
Sep 12	143.3	142.3	144.0
Sep 13	143.5	142.9	144.5
Sep 14	143.6	143.1	144.3
Sep 15	143.9	142.7	144.9
Sep 16	141.6	108.2	145.5
Sep 17	144.2	143.5	145.0
Sep 18	143.8	141.0	144.8
Sep 19	123.7	73.9	144.9
Sep 20	127.3	103.3	144.4
Sep 21	136.6	118.1	144.1
Sep 22	143.2	141.6	144.2
Sep 23	142.8	141.5	144.0
Sep 24	140.4	90.5	143.9
Sep 25	142.7	138.1	144.0
Sep 26	143.4	142.8	144.1
Sep 27	143.6	142.8	144.1
Sep 28	144.1	143.5	145.0
Sep 29	144.6	144.1	145.5
Summary	140.3	121.3	144.6

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 73

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	113.0	111.2	115.5
Sep 2	112.9	95.6	115.9
Sep 3	114.0	112.2	118.2
Sep 4	108.8	78.1	116.2
Sep 5	83.0	69.4	112.8
Sep 6	94.5	69.9	112.7
Sep 7	108.9	106.2	111.0
Sep 8	107.0	104.6	110.3
Sep 9	107.7	105.5	110.5
Sep 10	108.1	106.4	110.3
Sep 11	109.5	108.0	111.9
Sep 12	109.7	108.7	112.5
Sep 13	110.6	109.1	112.5
Sep 14	111.4	109.9	113.8
Sep 15	111.9	110.3	114.7
Sep 16	110.7	90.8	115.0
Sep 17	112.6	111.3	115.2
Sep 18	110.6	107.4	113.5
Sep 19	91.6	69.9	110.6
Sep 20	82.6	64.5	111.8
Sep 21	97.9	68.6	111.4
Sep 22	106.3	102.5	108.7
Sep 23	106.3	105.1	109.5
Sep 24	104.5	90.3	108.0
Sep 25	104.5	101.2	108.6
Sep 26	103.8	99.4	107.3
Sep 27	99.0	96.4	103.0
Sep 28	99.4	96.4	104.6
Sep 29	99.2	95.7	104.3
Summary	104.8	82.6	114.0

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 74

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	121.3	119.5	123.3
Sep 2	120.4	110.0	123.1
Sep 3	121.0	119.0	123.9
Sep 4	114.9	78.1	123.6
Sep 5	86.3	70.0	127.3
Sep 6	104.6	69.3	132.6
Sep 7	121.3	118.9	122.9
Sep 8	120.0	118.1	122.5
Sep 9	120.3	118.3	122.8
Sep 10	120.7	119.2	122.8
Sep 11	120.9	119.6	123.3
Sep 12	119.9	117.3	121.6
Sep 13	119.8	118.3	122.6
Sep 14	119.3	118.0	121.2
Sep 15	118.4	115.8	121.6
Sep 16	118.0	104.3	122.3
Sep 17	119.6	118.1	122.6
Sep 18	119.2	114.9	121.8
Sep 19	95.6	69.5	125.7
Sep 20	93.7	65.7	130.4
Sep 21	109.8	68.0	129.9
Sep 22	120.7	118.2	122.8
Sep 23	117.3	114.0	120.5
Sep 24	115.9	112.0	119.8
Sep 25	117.0	109.0	120.6
Sep 26	118.0	115.8	120.5
Sep 27	118.1	116.6	119.1
Sep 28	118.2	116.7	120.7
Sep 29	118.4	116.7	121.6
Summary	115.5	86.3	121.3

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 75

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	85.3	67.9	109.4
Sep 2	86.7	68.9	112.8
Sep 3	87.9	68.8	115.5
Sep 4	86.7	70.1	112.1
Sep 5	79.5	69.2	99.6
Sep 6	75.9	69.0	93.0
Sep 7	79.1	67.4	97.7
Sep 8	79.1	62.0	103.1
Sep 9	81.1	63.5	105.6
Sep 10	94.3	63.9	127.4
Sep 11	125.6	123.7	127.4
Sep 12	123.6	121.8	125.3
Sep 13	123.0	121.6	125.0
Sep 14	122.2	120.9	124.0
Sep 15	124.3	117.8	128.0
Sep 16	125.1	112.4	127.5
Sep 17	126.0	125.2	127.3
Sep 18	125.3	123.2	126.8
Sep 19	101.8	73.5	127.1
Sep 20	96.6	71.4	127.6
Sep 21	111.7	73.9	126.9
Sep 22	124.2	118.6	125.5
Sep 23	123.4	121.8	124.6
Sep 24	122.9	121.1	124.3
Sep 25	123.4	122.0	124.8
Sep 26	123.7	122.8	124.7
Sep 27	123.6	123.0	124.4
Sep 28	123.8	123.0	124.8
Sep 29	123.9	123.1	125.0
Summary	107.9	75.9	126.0

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 76

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	133.5	133.2	133.8
Sep 2	132.4	100.4	134.1
Sep 3	133.9	133.5	134.3
Sep 4	130.2	99.2	134.2
Sep 5	123.5	116.9	134.2
Sep 6	128.6	119.1	133.9
Sep 7	133.3	133.1	133.5
Sep 8	133.4	133.1	133.8
Sep 9	133.5	133.3	133.8
Sep 10	133.6	133.3	133.9
Sep 11	133.7	133.4	134.0
Sep 12	133.7	133.4	133.9
Sep 13	133.7	133.5	133.9
Sep 14	133.6	133.5	133.9
Sep 15	133.5	133.2	133.8
Sep 16	131.5	92.4	133.8
Sep 17	133.2	133.1	133.4
Sep 18	133.0	132.7	133.4
Sep 19	122.9	100.1	133.2
Sep 20	124.1	109.3	133.4
Sep 21	129.1	119.8	133.1
Sep 22	132.1	130.7	132.4
Sep 23	131.8	131.6	132.0
Sep 24	131.6	130.9	131.9
Sep 25	131.4	131.0	131.7
Sep 26	131.2	130.9	131.5
Sep 27	130.9	130.7	131.2
Sep 28	130.9	130.7	131.3
Sep 29	130.8	130.6	131.2
Summary	131.3	122.9	133.9

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 77

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	85.1	68.1	108.2
Sep 2	86.1	69.0	109.5
Sep 3	87.1	69.0	111.4
Sep 4	86.6	70.0	110.4
Sep 5	78.7	69.1	97.2
Sep 6	76.0	69.3	94.2
Sep 7	77.3	67.3	93.3
Sep 8	78.8	62.3	101.2
Sep 9	80.1	63.6	100.7
Sep 10	78.5	64.0	96.6
Sep 11	82.4	70.9	100.3
Sep 12	77.3	69.6	101.0
Sep 13	78.9	69.8	97.5
Sep 14	77.6	65.8	96.1
Sep 15	80.0	64.1	104.0
Sep 16	81.8	64.1	105.3
Sep 17	80.9	66.6	105.5
Sep 18	77.3	67.9	103.1
Sep 19	76.4	67.3	100.5
Sep 20	80.4	65.0	100.5
Sep 21	81.6	67.4	103.1
Sep 22	75.5	64.7	93.6
Sep 23	70.4	62.2	87.8
Sep 24	66.4	56.9	81.8
Sep 25	65.9	50.2	87.5
Sep 26	64.9	48.9	89.0
Sep 27	62.4	46.7	82.8
Sep 28	66.0	48.6	89.6
Sep 29	70.7	52.6	95.9
Summary	76.9	62.4	87.1

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 78

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	114.6	113.2	116.8
Sep 2	113.8	99.7	116.1
Sep 3	114.5	112.9	117.0
Sep 4	110.9	84.4	116.8
Sep 5	101.6	83.3	117.3
Sep 6	110.6	102.4	117.7
Sep 7	113.4	111.7	114.9
Sep 8	111.7	110.1	113.9
Sep 9	112.0	109.2	114.7
Sep 10	111.0	109.8	112.8
Sep 11	112.8	109.1	115.9
Sep 12	113.3	112.2	115.5
Sep 13	113.3	112.2	115.2
Sep 14	113.5	112.2	115.9
Sep 15	114.2	112.5	116.9
Sep 16	112.6	84.2	117.3
Sep 17	114.7	113.5	117.3
Sep 18	113.9	112.5	116.7
Sep 19	101.6	73.4	117.9
Sep 20	104.2	81.7	117.7
Sep 21	111.2	98.8	117.6
Sep 22	113.3	106.0	115.4
Sep 23	113.0	111.1	115.6
Sep 24	111.0	79.7	115.2
Sep 25	113.0	111.8	115.2
Sep 26	112.9	111.5	115.4
Sep 27	112.4	110.9	114.9
Sep 28	112.5	109.2	115.7
Sep 29	112.6	110.9	115.7
Summary	111.7	101.6	114.7

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 79

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	85.5	68.5	110.0
Sep 2	86.6	69.6	111.0
Sep 3	88.1	69.6	116.0
Sep 4	86.8	70.7	111.9
Sep 5	80.5	70.3	101.5
Sep 6	76.6	70.2	95.9
Sep 7	77.8	68.4	92.4
Sep 8	79.6	63.0	103.8
Sep 9	80.9	64.2	104.1
Sep 10	79.1	64.5	97.9
Sep 11	82.7	71.3	99.9
Sep 12	77.7	70.1	97.6
Sep 13	79.4	70.4	102.4
Sep 14	79.4	66.3	97.3
Sep 15	80.5	64.6	106.5
Sep 16	81.7	64.8	103.3
Sep 17	81.0	66.8	102.8
Sep 18	77.1	68.4	100.6
Sep 19	75.9	67.7	100.8
Sep 20	80.2	65.8	102.8
Sep 21	82.2	68.6	104.6
Sep 22	75.5	64.4	94.8
Sep 23	70.1	62.4	86.2
Sep 24	66.6	57.2	83.6
Sep 25	66.3	50.1	88.9
Sep 26	65.2	49.0	87.3
Sep 27	63.0	46.8	82.9
Sep 28	66.5	48.8	90.2
Sep 29	70.9	52.5	97.7
Summary	77.4	63.0	88.1

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 80

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	83.7	66.3	109.9
Sep 2	85.2	67.3	110.6
Sep 3	85.8	67.1	110.4
Sep 4	86.4	68.2	112.0
Sep 5	78.3	67.8	99.9
Sep 6	75.5	67.9	96.8
Sep 7	75.4	65.1	92.1
Sep 8	77.2	60.5	102.7
Sep 9	78.9	61.8	101.8
Sep 10	77.7	61.8	99.0
Sep 11	81.4	69.0	101.9
Sep 12	76.4	67.6	100.8
Sep 13	78.0	66.8	96.0
Sep 14	76.9	63.2	98.4
Sep 15	79.9	62.3	105.8
Sep 16	80.0	62.2	106.0
Sep 17	78.8	64.3	105.6
Sep 18	77.9	66.1	103.7
Sep 19	76.2	66.4	101.5
Sep 20	77.5	63.4	105.4
Sep 21	80.6	65.5	104.7
Sep 22	74.0	63.9	91.2
Sep 23	68.5	59.0	85.4
Sep 24	65.5	56.1	82.6
Sep 25	64.1	47.2	88.6
Sep 26	63.5	46.0	88.2
Sep 27	60.7	43.4	85.6
Sep 28	65.4	46.1	90.8
Sep 29	68.8	50.0	96.0
Summary	75.8	60.7	86.4

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 81

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	174.7	173.7	175.9
Sep 2	172.4	138.7	174.8
Sep 3	173.6	172.8	174.9
Sep 4	163.5	91.6	173.9
Sep 5	103.0	79.0	182.3
Sep 6	144.0	77.6	184.0
Sep 7	175.2	172.7	177.9
Sep 8	173.8	173.0	174.9
Sep 9	173.3	172.5	174.4
Sep 10	173.4	172.2	174.3
Sep 11	173.3	171.4	173.9
Sep 12	172.9	170.3	173.6
Sep 13	172.4	170.9	173.7
Sep 14	171.8	171.1	172.4
Sep 15	171.6	170.5	172.4
Sep 16	169.4	138.0	175.2
Sep 17	171.9	170.8	173.4
Sep 18	171.6	167.6	172.8
Sep 19	129.7	78.7	179.4
Sep 20	120.2	73.4	182.5
Sep 21	151.9	80.8	183.6
Sep 22	174.7	172.7	176.3
Sep 23	171.7	170.0	173.8
Sep 24	169.4	133.5	172.8
Sep 25	171.1	168.3	172.0
Sep 26	171.2	169.9	171.9
Sep 27	170.9	169.5	171.7
Sep 28	171.2	170.1	172.3
Sep 29	171.6	170.5	173.3
Summary	164.7	103.0	175.2

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 82

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	165.3	164.3	166.2
Sep 2	164.3	143.7	166.4
Sep 3	165.1	164.4	166.7
Sep 4	162.5	147.2	165.9
Sep 5	157.3	150.1	167.7
Sep 6	163.1	156.5	168.3
Sep 7	163.3	160.8	165.2
Sep 8	162.6	161.5	164.0
Sep 9	162.9	161.0	164.5
Sep 10	163.9	162.3	165.1
Sep 11	164.5	163.1	165.1
Sep 12	164.0	160.7	165.1
Sep 13	163.0	161.6	164.3
Sep 14	163.7	162.7	164.4
Sep 15	164.2	163.0	165.5
Sep 16	163.1	140.8	166.6
Sep 17	165.1	163.4	166.3
Sep 18	164.9	162.0	166.1
Sep 19	156.5	130.3	167.7
Sep 20	160.4	154.8	168.0
Sep 21	164.3	156.6	168.3
Sep 22	165.3	163.3	166.2
Sep 23	164.6	163.6	166.7
Sep 24	164.2	161.1	167.0
Sep 25	163.7	144.8	165.8
Sep 26	164.7	163.3	165.6
Sep 27	164.4	162.0	165.7
Sep 28	164.7	163.0	166.3
Sep 29	164.9	148.2	167.5
Summary	163.5	156.5	165.3

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 83

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	145.6	141.0	152.4
Sep 2	145.8	112.2	154.0
Sep 3	147.8	140.3	156.8
Sep 4	139.1	82.9	155.8
Sep 5	89.0	73.4	132.7
Sep 6	109.8	70.5	146.6
Sep 7	137.6	127.2	144.8
Sep 8	141.7	136.6	149.4
Sep 9	141.5	135.4	147.6
Sep 10	142.6	136.9	147.6
Sep 11	144.6	138.0	150.3
Sep 12	143.6	135.0	147.9
Sep 13	143.1	136.3	149.0
Sep 14	143.1	138.9	147.9
Sep 15	143.6	132.0	152.7
Sep 16	142.6	110.6	151.8
Sep 17	146.6	139.1	152.3
Sep 18	144.6	125.1	152.4
Sep 19	108.0	72.5	148.9
Sep 20	97.7	67.2	144.8
Sep 21	119.6	70.4	151.2
Sep 22	144.3	131.8	153.0
Sep 23	134.5	77.9	149.4
Sep 24	134.3	113.1	144.7
Sep 25	138.9	112.4	146.1
Sep 26	140.0	134.6	149.4
Sep 27	140.4	133.3	145.6
Sep 28	144.4	139.1	150.4
Sep 29	147.0	140.8	154.0
Summary	135.9	89.0	147.8

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 84

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	157.3	156.7	157.7
Sep 2	157.1	156.6	157.8
Sep 3	157.2	156.6	158.0
Sep 4	153.5	122.4	158.0
Sep 5	150.7	125.0	166.1
Sep 6	158.3	147.4	170.2
Sep 7	157.3	156.7	158.0
Sep 8	156.9	156.4	157.6
Sep 9	157.0	156.4	157.7
Sep 10	157.0	156.7	157.7
Sep 11	157.1	156.8	157.9
Sep 12	156.9	156.6	157.7
Sep 13	156.9	156.5	157.5
Sep 14	156.7	156.5	157.1
Sep 15	156.4	154.9	157.2
Sep 16	155.4	126.5	158.8
Sep 17	156.6	156.1	157.4
Sep 18	156.5	155.9	157.3
Sep 19	144.2	109.6	164.9
Sep 20	153.6	134.0	167.5
Sep 21	159.0	151.3	168.2
Sep 22	157.0	156.5	157.6
Sep 23	156.2	151.9	157.3
Sep 24	153.7	98.7	157.2
Sep 25	156.3	155.7	157.2
Sep 26	156.4	155.9	157.0
Sep 27	156.4	156.0	156.9
Sep 28	156.5	155.9	157.3
Sep 29	156.6	156.1	157.4
Summary	155.9	144.2	159.0

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 85

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	136.8	134.8	140.1
Sep 2	136.4	130.3	141.1
Sep 3	136.6	133.9	140.8
Sep 4	128.0	81.6	139.6
Sep 5	89.5	68.4	138.2
Sep 6	110.1	69.4	139.7
Sep 7	134.7	132.4	137.5
Sep 8	133.9	132.0	137.5
Sep 9	134.1	132.1	138.0
Sep 10	134.4	132.7	138.2
Sep 11	134.9	133.5	137.4
Sep 12	133.5	130.6	136.5
Sep 13	133.3	130.8	136.3
Sep 14	132.5	129.7	137.1
Sep 15	134.0	130.9	138.0
Sep 16	132.0	87.8	139.6
Sep 17	135.2	133.2	139.7
Sep 18	134.4	131.0	138.9
Sep 19	106.7	75.6	138.8
Sep 20	94.1	64.2	139.0
Sep 21	115.6	67.4	136.2
Sep 22	132.3	125.0	137.1
Sep 23	132.4	130.4	137.1
Sep 24	130.4	100.0	135.5
Sep 25	131.5	127.4	135.2
Sep 26	131.2	128.9	134.0
Sep 27	130.5	128.4	133.3
Sep 28	130.8	127.2	135.3
Sep 29	130.0	126.7	133.9
Summary	127.9	89.5	136.8

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 86

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	152.3	150.9	152.9
Sep 2	152.5	151.9	153.0
Sep 3	152.4	151.9	152.9
Sep 4	147.6	107.8	153.1
Sep 5	137.3	83.5	155.5
Sep 6	148.8	134.4	156.9
Sep 7	152.0	151.4	152.3
Sep 8	151.8	151.4	152.4
Sep 9	151.9	151.4	152.4
Sep 10	152.0	151.4	152.5
Sep 11	152.1	151.8	152.6
Sep 12	152.0	151.7	152.6
Sep 13	152.0	151.7	152.5
Sep 14	151.9	151.7	152.4
Sep 15	152.0	151.4	152.7
Sep 16	149.8	114.4	153.4
Sep 17	152.3	151.8	152.8
Sep 18	152.3	151.8	152.9
Sep 19	133.7	95.9	152.3
Sep 20	141.7	134.7	145.7
Sep 21	150.0	123.7	157.0
Sep 22	151.1	122.8	152.8
Sep 23	151.7	151.3	152.4
Sep 24	151.6	149.9	152.3
Sep 25	151.9	151.4	152.5
Sep 26	151.9	151.6	152.4
Sep 27	152.0	151.8	152.4
Sep 28	152.2	151.7	152.7
Sep 29	152.4	152.0	152.9
Summary	150.1	133.7	152.5

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 87

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	110.7	101.2	123.8
Sep 2	112.3	101.1	127.4
Sep 3	113.8	101.4	129.8
Sep 4	112.0	100.7	125.3
Sep 5	103.6	94.0	120.5
Sep 6	106.3	94.1	122.3
Sep 7	105.5	98.1	113.2
Sep 8	107.0	95.4	121.1
Sep 9	107.4	95.7	120.7
Sep 10	107.6	99.0	120.3
Sep 11	110.7	105.7	120.0
Sep 12	106.2	99.2	117.6
Sep 13	105.8	98.8	115.9
Sep 14	105.7	98.2	117.7
Sep 15	110.4	96.7	125.2
Sep 16	114.1	103.5	128.7
Sep 17	115.5	107.6	130.0
Sep 18	111.9	93.3	125.1
Sep 19	105.2	88.5	124.9
Sep 20	107.2	96.7	125.9
Sep 21	112.3	98.8	126.3
Sep 22	108.3	97.7	121.3
Sep 23	96.6	88.6	108.2
Sep 24	92.3	79.1	107.6
Sep 25	95.9	84.7	110.0
Sep 26	96.3	87.1	110.7
Sep 27	94.2	86.0	103.6
Sep 28	98.0	86.3	114.7
Sep 29	102.4	89.9	119.0
Summary	106.0	92.3	115.5

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 88

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	161.3	160.7	161.8
Sep 2	161.2	160.5	162.8
Sep 3	161.1	160.4	162.1
Sep 4	158.9	115.1	162.1
Sep 5	159.7	109.0	170.6
Sep 6	153.7	117.7	171.1
Sep 7	161.5	160.7	162.2
Sep 8	161.2	160.6	161.7
Sep 9	161.2	160.4	161.7
Sep 10	161.3	160.8	161.9
Sep 11	161.2	160.5	161.9
Sep 12	161.1	160.7	161.8
Sep 13	161.1	160.5	161.7
Sep 14	160.9	160.5	161.5
Sep 15	160.9	160.4	161.5
Sep 16	158.3	102.6	162.7
Sep 17	160.7	160.3	161.5
Sep 18	160.8	160.3	161.5
Sep 19	154.9	100.7	166.0
Sep 20	156.8	120.7	169.0
Sep 21	163.8	155.8	171.1
Sep 22	161.5	161.0	162.2
Sep 23	160.9	159.9	161.9
Sep 24	159.1	122.8	161.3
Sep 25	160.9	160.3	161.4
Sep 26	161.0	160.5	161.5
Sep 27	161.0	160.7	161.3
Sep 28	161.0	160.4	161.3
Sep 29	161.0	160.5	161.3
Summary	160.3	153.7	163.8

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 89

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	188.0	187.1	189.2
Sep 2	188.1	186.2	189.3
Sep 3	188.0	185.8	189.6
Sep 4	186.0	173.2	188.6
Sep 5	182.1	171.8	190.9
Sep 6	187.3	180.6	192.6
Sep 7	187.9	186.9	188.9
Sep 8	187.3	186.1	189.1
Sep 9	187.2	185.9	188.4
Sep 10	187.6	185.8	188.8
Sep 11	188.3	187.5	188.8
Sep 12	187.6	185.6	188.9
Sep 13	187.4	184.7	189.2
Sep 14	187.6	186.7	188.3
Sep 15	187.7	186.7	189.1
Sep 16	187.1	171.3	190.6
Sep 17	188.3	186.4	189.4
Sep 18	187.9	180.1	189.8
Sep 19	182.7	161.4	191.8
Sep 20	185.7	181.0	191.7
Sep 21	188.8	182.7	193.1
Sep 22	188.7	185.3	190.1
Sep 23	186.7	172.7	189.0
Sep 24	187.1	183.3	189.0
Sep 25	187.4	180.9	188.6
Sep 26	187.7	186.3	189.1
Sep 27	187.5	184.7	188.5
Sep 28	188.0	185.1	189.7
Sep 29	188.8	187.6	190.2
Summary	187.3	182.1	188.8

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 90

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	135.7	135.4	136.0
Sep 2	135.4	128.2	136.1
Sep 3	135.6	135.2	136.1
Sep 4	128.2	76.9	136.1
Sep 5	87.3	69.3	139.2
Sep 6	110.2	69.2	138.7
Sep 7	135.0	134.7	135.3
Sep 8	134.9	134.5	135.3
Sep 9	134.8	134.5	135.2
Sep 10	134.7	134.4	135.0
Sep 11	134.7	134.5	135.0
Sep 12	134.5	134.2	134.9
Sep 13	134.4	134.2	134.8
Sep 14	134.3	134.1	134.6
Sep 15	134.1	133.7	134.6
Sep 16	133.4	112.8	134.5
Sep 17	134.2	133.9	134.7
Sep 18	134.1	133.6	134.5
Sep 19	106.8	79.3	135.7
Sep 20	106.0	81.0	137.2
Sep 21	121.1	81.6	135.6
Sep 22	133.8	133.5	134.1
Sep 23	133.4	133.2	133.7
Sep 24	132.4	118.1	133.5
Sep 25	131.6	94.6	133.6
Sep 26	133.1	132.8	133.4
Sep 27	132.9	132.6	133.2
Sep 28	132.8	132.5	133.3
Sep 29	132.8	132.5	133.2
Summary	129.0	87.3	135.7

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 91

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	157.6	156.5	158.9
Sep 2	157.6	156.8	158.5
Sep 3	157.7	156.4	159.3
Sep 4	156.1	134.0	159.7
Sep 5	161.5	103.5	166.9
Sep 6	161.3	153.7	167.1
Sep 7	156.7	155.3	157.9
Sep 8	157.3	156.1	158.6
Sep 9	157.6	156.5	158.5
Sep 10	157.8	156.8	158.5
Sep 11	157.9	157.1	158.5
Sep 12	157.4	156.7	158.0
Sep 13	157.2	155.8	157.9
Sep 14	156.7	156.0	157.3
Sep 15	155.9	154.2	157.1
Sep 16	155.0	133.6	160.3
Sep 17	156.1	154.5	156.8
Sep 18	155.9	153.0	157.0
Sep 19	152.3	115.1	160.5
Sep 20	161.3	145.9	166.5
Sep 21	159.6	155.7	164.8
Sep 22	155.7	153.8	156.8
Sep 23	149.2	106.8	156.3
Sep 24	153.6	151.5	155.5
Sep 25	152.3	102.8	155.7
Sep 26	154.7	153.8	155.9
Sep 27	154.2	153.1	155.2
Sep 28	154.6	153.7	155.7
Sep 29	154.8	153.8	156.0
Summary	156.4	149.2	161.5

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 92

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	111.0	99.6	126.7
Sep 2	111.6	98.0	126.8
Sep 3	114.2	100.1	132.7
Sep 4	110.3	97.5	128.6
Sep 5	98.2	82.0	115.3
Sep 6	98.6	81.7	122.0
Sep 7	100.6	90.5	105.3
Sep 8	103.2	90.8	123.5
Sep 9	102.1	88.6	114.8
Sep 10	102.4	93.8	114.6
Sep 11	107.8	102.5	118.3
Sep 12	104.1	86.9	118.6
Sep 13	103.1	93.4	112.9
Sep 14	103.6	97.3	113.5
Sep 15	104.9	93.7	120.2
Sep 16	104.3	93.0	120.7
Sep 17	106.7	98.2	123.7
Sep 18	102.6	82.1	120.1
Sep 19	96.1	76.6	121.6
Sep 20	97.6	85.0	123.1
Sep 21	104.8	91.1	124.0
Sep 22	101.7	80.2	116.2
Sep 23	90.5	83.3	101.8
Sep 24	87.2	73.0	101.1
Sep 25	86.2	69.9	106.7
Sep 26	84.6	73.8	105.9
Sep 27	82.8	74.6	98.1
Sep 28	87.3	75.8	105.3
Sep 29	91.3	77.0	113.4
Summary	100.0	82.8	114.2

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 93

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	138.5	134.3	145.0
Sep 2	137.2	97.8	146.1
Sep 3	138.5	134.6	146.6
Sep 4	129.5	79.9	144.9
Sep 5	89.9	72.4	145.1
Sep 6	114.5	72.4	145.9
Sep 7	135.4	132.1	139.1
Sep 8	135.4	131.0	143.5
Sep 9	136.8	132.1	143.7
Sep 10	137.0	133.6	144.0
Sep 11	138.7	136.5	144.2
Sep 12	137.7	133.3	142.8
Sep 13	138.4	135.6	143.8
Sep 14	138.1	134.2	143.7
Sep 15	139.6	134.6	147.2
Sep 16	137.2	95.2	148.1
Sep 17	140.7	137.6	149.0
Sep 18	140.1	133.7	147.1
Sep 19	107.6	72.6	146.0
Sep 20	95.6	67.9	140.6
Sep 21	120.0	71.9	147.2
Sep 22	138.5	133.6	144.8
Sep 23	135.1	113.0	140.9
Sep 24	134.8	102.8	142.0
Sep 25	134.1	110.9	142.7
Sep 26	134.1	130.0	140.3
Sep 27	133.3	129.5	139.2
Sep 28	134.6	130.1	143.4
Sep 29	137.2	131.6	146.1
Summary	131.3	89.9	140.7

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 94

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	160.9	159.8	163.0
Sep 2	161.9	145.7	166.5
Sep 3	162.2	160.6	167.1
Sep 4	160.4	148.9	164.6
Sep 5	154.3	148.2	163.8
Sep 6	157.9	149.3	164.4
Sep 7	161.6	160.1	163.6
Sep 8	163.0	160.3	167.0
Sep 9	163.3	161.1	166.8
Sep 10	163.7	161.4	167.2
Sep 11	163.6	162.0	167.0
Sep 12	162.9	161.5	165.2
Sep 13	163.5	162.0	165.4
Sep 14	163.8	161.0	168.2
Sep 15	163.7	162.5	166.3
Sep 16	163.7	153.1	168.8
Sep 17	164.0	162.6	166.9
Sep 18	163.9	162.4	166.1
Sep 19	157.3	143.7	165.9
Sep 20	157.8	153.1	164.3
Sep 21	161.4	154.8	166.9
Sep 22	164.1	161.9	166.6
Sep 23	163.2	157.4	167.0
Sep 24	161.0	139.1	165.1
Sep 25	162.4	143.5	166.5
Sep 26	162.8	162.1	164.8
Sep 27	162.8	162.3	163.2
Sep 28	163.6	162.4	166.7
Sep 29	164.0	161.5	166.6
Summary	162.0	154.3	164.1

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 95

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	133.9	133.3	134.5
Sep 2	132.6	104.5	134.6
Sep 3	133.8	133.2	134.6
Sep 4	128.6	100.3	134.5
Sep 5	106.2	97.3	135.2
Sep 6	120.5	92.1	135.1
Sep 7	133.8	133.4	134.3
Sep 8	133.8	133.3	134.3
Sep 9	133.7	133.2	134.5
Sep 10	133.9	133.5	134.4
Sep 11	133.9	133.6	134.6
Sep 12	133.8	133.6	134.5
Sep 13	133.8	133.5	134.3
Sep 14	133.9	133.6	134.6
Sep 15	134.2	133.4	135.3
Sep 16	132.5	109.8	135.2
Sep 17	134.7	134.1	135.4
Sep 18	134.8	134.4	135.7
Sep 19	113.7	95.2	135.2
Sep 20	111.5	92.8	135.0
Sep 21	124.9	95.8	135.6
Sep 22	134.4	132.7	135.0
Sep 23	133.4	121.6	134.6
Sep 24	134.1	133.3	134.6
Sep 25	133.9	125.8	134.6
Sep 26	134.0	133.5	134.6
Sep 27	133.9	133.5	134.3
Sep 28	134.0	133.5	134.6
Sep 29	134.2	133.6	134.9
Summary	130.5	106.2	134.8

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 96

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	131.9	131.2	133.4
Sep 2	131.6	109.3	133.9
Sep 3	132.4	131.2	134.2
Sep 4	125.3	85.0	133.9
Sep 5	92.4	80.0	135.4
Sep 6	114.6	77.7	135.8
Sep 7	131.8	130.4	132.9
Sep 8	132.6	131.6	134.2
Sep 9	132.7	131.8	134.0
Sep 10	132.9	132.0	133.9
Sep 11	133.1	132.4	134.2
Sep 12	133.3	132.2	134.1
Sep 13	133.3	132.8	134.4
Sep 14	133.4	132.4	134.5
Sep 15	133.6	131.9	135.3
Sep 16	133.1	118.3	135.4
Sep 17	134.4	133.6	135.6
Sep 18	134.3	131.2	135.6
Sep 19	106.7	78.5	136.7
Sep 20	105.3	81.0	137.0
Sep 21	120.4	84.0	137.1
Sep 22	134.6	132.5	135.5
Sep 23	132.9	123.5	134.7
Sep 24	130.8	94.0	134.5
Sep 25	133.1	99.1	136.2
Sep 26	134.9	134.0	136.3
Sep 27	134.9	133.9	135.8
Sep 28	135.7	134.7	136.5
Sep 29	136.2	135.2	137.7
Summary	128.7	92.4	136.2

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 97

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	146.9	146.3	148.0
Sep 2	145.8	125.7	148.0
Sep 3	146.7	145.8	148.2
Sep 4	142.6	111.9	147.6
Sep 5	151.5	127.9	166.2
Sep 6	154.3	146.9	162.9
Sep 7	145.4	144.4	146.7
Sep 8	145.3	143.7	146.5
Sep 9	145.5	144.6	146.5
Sep 10	145.7	144.9	146.7
Sep 11	145.7	144.6	146.5
Sep 12	145.3	144.6	146.0
Sep 13	145.5	144.8	146.3
Sep 14	145.2	144.6	145.7
Sep 15	144.7	143.0	146.0
Sep 16	144.7	133.4	155.0
Sep 17	145.4	144.2	146.1
Sep 18	145.3	143.1	146.1
Sep 19	138.7	99.7	156.6
Sep 20	158.4	150.8	165.3
Sep 21	158.7	148.5	170.4
Sep 22	147.1	145.5	148.0
Sep 23	142.8	112.8	147.8
Sep 24	144.3	140.9	148.3
Sep 25	144.8	119.5	147.5
Sep 26	146.8	145.8	147.8
Sep 27	146.8	145.7	147.6
Sep 28	147.4	146.6	148.3
Sep 29	147.9	146.9	148.9
Summary	146.7	138.7	158.7

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 98

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	83.2	71.0	105.7
Sep 2	84.6	70.5	105.6
Sep 3	87.7	77.0	107.5
Sep 4	87.6	78.1	106.7
Sep 5	81.5	75.7	94.9
Sep 6	81.9	76.8	95.1
Sep 7	83.8	78.9	95.1
Sep 8	85.0	77.3	97.6
Sep 9	85.9	78.3	100.0
Sep 10	85.5	79.0	97.7
Sep 11	88.2	82.6	100.8
Sep 12	86.4	83.2	98.1
Sep 13	88.0	84.0	98.4
Sep 14	87.6	82.4	97.7
Sep 15	89.7	82.3	104.3
Sep 16	89.2	82.9	102.8
Sep 17	90.8	83.8	106.5
Sep 18	89.0	85.3	103.5
Sep 19	85.6	73.8	102.8
Sep 20	79.6	68.4	98.7
Sep 21	82.6	70.5	100.1
Sep 22	80.8	75.3	91.4
Sep 23	79.2	73.0	87.2
Sep 24	83.5	77.7	91.1
Sep 25	83.7	76.4	95.0
Sep 26	83.1	76.1	94.2
Sep 27	82.8	75.2	92.9
Sep 28	83.9	74.7	96.5
Sep 29	83.3	73.2	96.7
Summary	85.0	79.2	90.8

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 99

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	143.4	142.6	145.1
Sep 2	143.3	142.0	144.7
Sep 3	143.1	141.8	144.8
Sep 4	134.4	85.1	144.6
Sep 5	93.8	79.4	145.2
Sep 6	120.2	73.0	146.0
Sep 7	142.2	141.3	143.4
Sep 8	142.3	140.6	143.7
Sep 9	142.5	141.4	144.0
Sep 10	142.6	141.8	144.1
Sep 11	142.6	141.8	143.8
Sep 12	142.1	140.8	143.4
Sep 13	142.1	141.5	143.7
Sep 14	142.0	141.1	143.3
Sep 15	139.0	135.0	141.0
Sep 16	135.1	104.5	141.2
Sep 17	138.3	136.3	141.7
Sep 18	137.9	134.4	140.9
Sep 19	106.0	68.6	140.1
Sep 20	94.3	63.5	138.7
Sep 21	118.7	67.3	142.3
Sep 22	137.7	135.3	139.8
Sep 23	134.7	123.2	138.4
Sep 24	133.3	84.3	138.4
Sep 25	135.8	124.6	139.5
Sep 26	136.8	134.9	139.3
Sep 27	136.7	135.1	139.2
Sep 28	137.1	135.3	139.6
Sep 29	137.7	134.8	140.4
Summary	133.6	93.8	143.4

Solid Waste Permit 588 Daily Wellhead Temperature

Averages for Well 100

Bristol, Virginia

Date	Average (°F)	Minimum (°F)	Maximum (°F)
Sep 1	157.5	157.1	157.9
Sep 2	149.8	148.7	151.0
Sep 3	157.5	156.8	158.1
Sep 4	140.9	81.8	150.8
Sep 5	149.9	131.9	159.8
Sep 6	133.0	82.3	163.8
Sep 7	157.6	157.4	158.0
Sep 8	149.6	148.0	150.8
Sep 9	157.6	157.1	158.1
Sep 10	148.6	147.3	149.9
Sep 11	157.7	157.5	158.0
Sep 12	148.1	145.9	149.1
Sep 13	157.7	157.4	158.1
Sep 14	147.5	146.7	148.3
Sep 15	157.6	157.2	158.1
Sep 16	142.4	93.9	151.4
Sep 17	157.6	157.3	158.1
Sep 18	146.7	145.1	148.2
Sep 19	151.0	135.0	159.7
Sep 20	120.9	89.9	160.3
Sep 21	157.1	149.8	161.6
Sep 22	147.7	121.4	150.4
Sep 23	157.0	145.7	158.2
Sep 24	145.9	144.3	148.1
Sep 25	157.4	156.9	157.8
Sep 26	146.2	144.4	147.5
Sep 27	157.5	157.2	157.8
Sep 28	146.3	144.8	147.7
Sep 29	157.6	157.3	158.0
Summary	156.7	149.9	158.0

APPENDIX D | SWP 588 DAILY BOREHOLE TEMPERATURE AVERAGES

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SOLID WASTE PERMIT 588 DAILY BOREHOLE TEMPERATURE AVERAGES FOR BOREHOLE 1

Date	Depth from Surface					
	25 ft	50 ft	75 ft	100 ft	125 ft	150 ft
1-Sep	152.8	223.8	225.2	242.2	253.1	261.1
2-Sep	153.1	223.9	225.3	242.3	253.2	261.2
3-Sep	153.1	223.9	225.2	242.3	253.2	261.2
4-Sep	153.0	223.9	225.2	242.2	253.1	261.1
5-Sep	152.7	223.7	225.0	241.9	252.9	260.9
6-Sep	153.4	223.7	225.0	241.8	252.8	260.8
7-Sep	154.4	223.9	225.1	241.9	253.0	261.0
8-Sep	152.9	224.1	225.1	241.7	252.9	260.9
9-Sep	152.7	224.1	225.1	241.7	252.8	260.8
10-Sep	152.7	224.0	225.0	241.7	252.8	260.8
11-Sep	152.9	224.1	225.1	241.9	253.0	260.9
12-Sep	153.0	224.0	225.0	241.8	253.0	260.9
13-Sep	153.1	224.0	225.0	241.8	252.8	260.8
14-Sep	153.2	224.0	225.0	241.7	252.8	260.8
15-Sep	153.3	224.1	225.0	241.8	252.8	260.8
16-Sep	153.5	224.3	225.1	241.9	253.0	260.9
17-Sep	153.6	224.3	225.1	241.8	252.9	260.9
18-Sep	153.6	224.2	225.0	241.9	252.9	260.9
19-Sep	153.6	224.1	225.1	241.9	252.9	260.9
20-Sep	153.8	224.3	225.2	241.9	252.9	260.8
21-Sep	153.8	224.5	225.5	241.9	252.9	260.8
22-Sep	153.7	224.2	225.2	241.7	252.8	260.7
23-Sep	153.6	224.0	224.9	241.5	252.7	260.6
24-Sep	153.6	223.9	224.8	241.4	252.6	260.5
25-Sep	153.5	223.9	224.7	241.2	252.4	260.3
26-Sep	153.6	224.0	224.8	241.4	252.4	260.4
27-Sep	153.4	223.7	224.6	241.1	252.3	260.1
28-Sep	153.6	223.8	224.7	241.3	252.4	260.3
29-Sep	153.7	223.9	224.8	241.4	252.5	260.4
30-Sep	153.8	224.0	224.8	241.4	252.6	260.4
Average	153.4	224.0	225.0	241.7	252.8	260.8

SOLID WASTE PERMIT 588 DAILY BOREHOLE TEMPERATURE AVERAGES FOR BOREHOLE 5

Date	Depth from Surface							
	25 ft	50 ft	75 ft	100 ft	125 ft	150 ft	175 ft	200 ft
1-Sep	161.6	209.8	210.2	221.4	230.2	229.7	207.9	199.1
2-Sep	171.1	209.8	210.2	221.3	230.2	229.5	206.8	199.0
3-Sep	175.9	210.0	210.4	221.5	230.5	229.7	206.5	199.2
4-Sep	179.1	209.8	210.3	221.5	230.4	229.7	206.2	199.0
5-Sep	183.5	209.7	210.1	221.3	230.2	229.4	205.7	198.8
6-Sep	179.6	209.6	209.9	221.2	230.1	229.2	205.6	198.7
7-Sep	181.2	209.5	209.9	221.1	230.1	229.1	205.7	198.6
8-Sep	183.1	209.5	209.9	220.9	230.0	229.3	206.1	198.5
9-Sep	184.6	209.6	210.1	221.0	230.1	229.5	206.3	198.7
10-Sep	183.7	209.5	209.9	220.9	230.0	229.3	206.9	198.5
11-Sep	183.2	209.6	210.0	221.0	230.1	229.3	206.9	198.6
12-Sep	183.4	209.4	209.8	220.9	229.9	229.0	206.0	198.4
13-Sep	184.2	209.5	209.9	221.1	230.1	229.1	205.8	198.5
14-Sep	184.4	209.4	209.8	221.0	230.0	229.0	205.5	198.4
15-Sep	183.9	209.5	210.0	221.0	230.2	229.1	205.5	198.4
16-Sep	184.4	209.5	209.9	221.0	230.1	228.9	205.3	198.3
17-Sep	185.5	209.5	209.9	221.0	230.0	228.9	205.2	198.3
18-Sep	185.6	209.3	209.8	220.9	229.9	228.7	205.0	198.1
19-Sep	185.9	209.4	209.8	221.1	230.1	228.8	205.1	198.2
20-Sep	186.5	209.4	209.8	221.0	230.0	228.7	205.1	198.1
21-Sep	185.5	209.4	209.8	221.0	230.0	228.7	205.1	198.1
22-Sep	184.9	209.2	209.7	221.0	229.9	228.6	205.8	198.0
23-Sep	184.6	209.1	209.5	220.8	229.7	228.3	205.7	197.7
24-Sep	185.0	209.0	209.4	220.6	229.7	228.1	206.4	197.7
25-Sep	185.2	209.0	209.4	220.7	229.7	228.0	206.8	197.7
26-Sep	185.2	209.0	209.4	220.5	229.6	228.0	206.8	197.5
27-Sep	185.2	208.8	209.3	220.3	229.5	227.9	206.5	197.4
28-Sep	185.0	208.9	209.4	220.5	229.7	228.0	206.9	197.5
29-Sep	184.9	209.1	209.5	220.5	229.8	228.0	207.1	197.6
30-Sep	184.3	209.1	209.5	220.6	229.8	228.0	207.5	197.6
Average	182.7	209.4	209.8	221.0	230.0	228.8	206.1	198.3

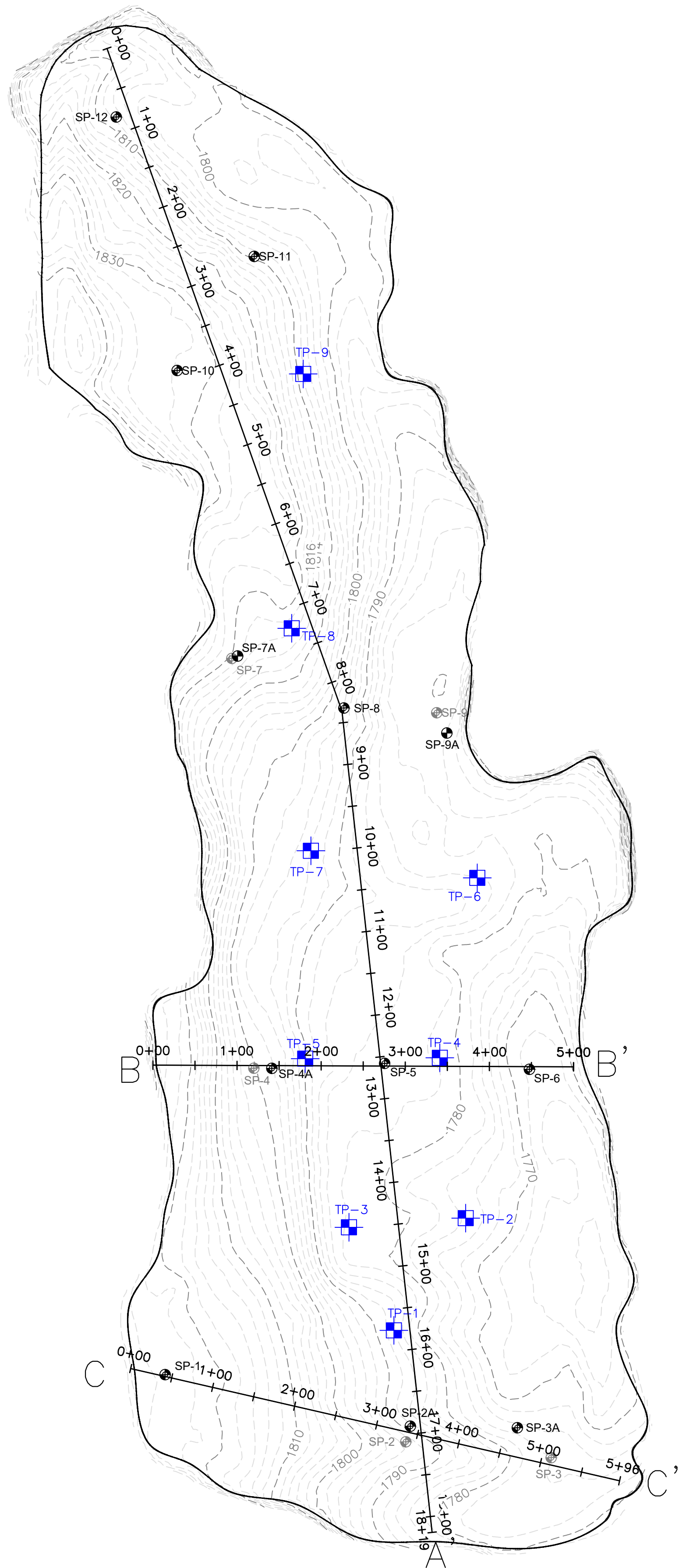
SOLID WASTE PERMIT 588 DAILY BOREHOLE TEMPERATURE AVERAGES FOR BOREHOLE 8

Date	Depth from Surface							
	25 ft	50 ft	75 ft	100 ft	125 ft	150 ft	175 ft	200 ft
1-Sep	182.9	193.4	193.6	195.5	199.3	198.9	186.9	164.2
2-Sep	183.2	193.4	193.6	195.6	199.3	199.0	187.0	164.2
3-Sep	183.4	193.5	193.6	195.6	199.3	199.0	186.9	164.0
4-Sep	183.7	193.4	193.6	195.6	199.2	199.0	186.9	163.7
5-Sep	184.8	193.3	193.5	195.5	199.1	198.9	186.8	163.5
6-Sep	184.0	193.2	193.5	195.4	198.9	198.8	186.7	163.3
7-Sep	183.2	193.2	193.4	195.4	198.7	198.7	186.6	163.0
8-Sep	183.2	193.3	193.5	195.5	198.8	198.8	186.6	163.0
9-Sep	183.4	193.3	193.6	195.5	198.9	198.8	186.6	163.0
10-Sep	183.4	193.3	193.6	195.5	198.8	198.8	186.7	162.9
11-Sep	182.3	193.5	193.7	196.0	199.0	198.8	186.7	163.0
12-Sep	179.5	193.5	193.7	196.2	199.1	198.7	186.5	162.8
13-Sep	178.2	193.7	194.0	196.4	199.3	198.9	186.7	163.0
14-Sep	177.0	193.7	194.0	196.4	199.3	198.8	186.7	162.9
15-Sep	175.9	193.8	194.0	196.5	199.4	198.8	186.8	162.9
16-Sep	175.6	193.9	194.1	196.5	199.5	198.8	186.8	162.8
17-Sep	175.0	194.0	194.2	196.6	199.5	198.8	186.9	162.8
18-Sep	174.4	193.9	194.1	196.5	199.4	198.6	186.8	162.7
19-Sep	175.9	194.1	194.2	196.5	199.5	198.8	186.8	162.9
20-Sep	177.1	194.1	194.3	196.6	199.5	198.8	186.9	162.9
21-Sep	175.4	194.0	194.3	196.6	199.6	198.8	187.0	163.0
22-Sep	171.2	194.0	194.2	196.6	199.5	198.8	186.9	163.0
23-Sep	170.8	193.7	194.0	196.4	199.3	198.5	186.7	162.7
24-Sep	169.7	193.8	194.0	196.4	199.4	198.6	186.8	163.0
25-Sep	170.6	193.6	193.9	196.3	199.2	198.4	186.7	163.1
26-Sep	171.3	193.6	193.9	196.2	199.2	198.3	186.7	163.3
27-Sep	171.4	193.6	193.8	196.1	199.2	198.2	186.6	163.3
28-Sep	170.9	193.7	193.9	196.2	199.3	198.4	186.8	163.5
29-Sep	170.6	193.9	194.1	196.3	199.4	198.5	186.8	163.7
30-Sep	170.2	194.0	194.2	196.4	199.5	198.6	186.9	163.8
Average	177.3	193.6	193.9	196.1	199.2	198.7	186.8	163.2

SOLID WASTE PERMIT 588 DAILY BOREHOLE TEMPERATURE AVERAGES FOR BOREHOLE 9

Date	Depth from Surface							
	25 ft	50 ft	75 ft	100 ft	125 ft	150 ft	175 ft	200 ft
1-Sep	109.8	149.4	148.8	148.2	142.8	129.3	112.3	98.7
2-Sep	109.8	149.4	148.7	148.2	142.8	129.3	111.8	98.0
3-Sep	109.8	149.4	148.6	148.2	142.9	129.3	111.7	97.8
4-Sep	109.9	149.4	148.8	148.2	142.8	129.3	111.6	97.5
5-Sep	109.8	149.6	149.2	147.6	142.5	128.9	111.0	96.9
6-Sep	109.8	149.5	149.0	147.7	142.5	128.9	110.5	96.7
7-Sep	109.7	149.3	148.7	147.9	142.6	129.1	110.4	96.8
8-Sep	109.7	149.4	148.9	147.8	142.5	129.0	110.4	96.6
9-Sep	109.7	149.5	149.1	147.9	142.5	128.9	110.1	96.3
10-Sep	109.5	149.3	148.7	147.8	142.4	128.8	109.5	96.0
11-Sep	109.8	149.5	148.9	148.1	142.7	129.0	109.3	96.2
12-Sep	109.6	149.3	148.7	148.0	142.5	128.9	108.8	96.4
13-Sep	109.7	149.4	148.8	148.0	142.6	128.8	108.6	96.6
14-Sep	109.7	149.5	149.0	148.0	142.6	128.9	108.6	97.0
15-Sep	109.9	149.7	149.3	147.9	142.6	129.0	109.0	97.5
16-Sep	109.9	149.7	149.3	147.9	142.7	129.0	109.4	97.8
17-Sep	109.8	149.6	149.1	148.0	142.7	129.1	109.6	98.2
18-Sep	109.7	149.4	148.9	147.9	142.5	128.9	109.6	98.5
19-Sep	109.8	149.7	149.2	147.9	142.7	129.1	109.6	98.9
20-Sep	110.0	149.8	149.4	147.8	142.6	129.0	109.7	99.1
21-Sep	110.0	149.7	149.2	147.9	142.7	129.1	110.1	99.5
22-Sep	109.6	149.3	148.8	147.8	142.5	128.9	110.4	99.5
23-Sep	109.5	149.2	148.7	147.6	142.3	128.7	110.6	99.7
24-Sep	109.5	149.2	148.7	147.5	142.3	128.6	111.6	100.0
25-Sep	109.3	149.0	148.5	147.4	142.2	128.5	111.8	100.2
26-Sep	109.3	148.9	148.4	147.4	142.2	128.5	112.1	100.4
27-Sep	109.2	148.9	148.4	147.3	142.1	128.3	112.2	100.6
28-Sep	109.4	149.2	148.6	147.4	142.2	128.5	112.5	101.0
29-Sep	109.7	149.5	148.9	147.5	142.4	128.7	112.8	101.3
30-Sep	109.6	149.6	149.0	147.5	142.4	128.7	112.9	101.4
Average	109.7	149.4	148.9	147.8	142.5	128.9	110.6	98.4

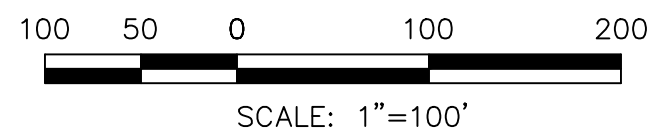
APPENDIX E | MONTHLY TOPOGRAPHY ANALYSIS



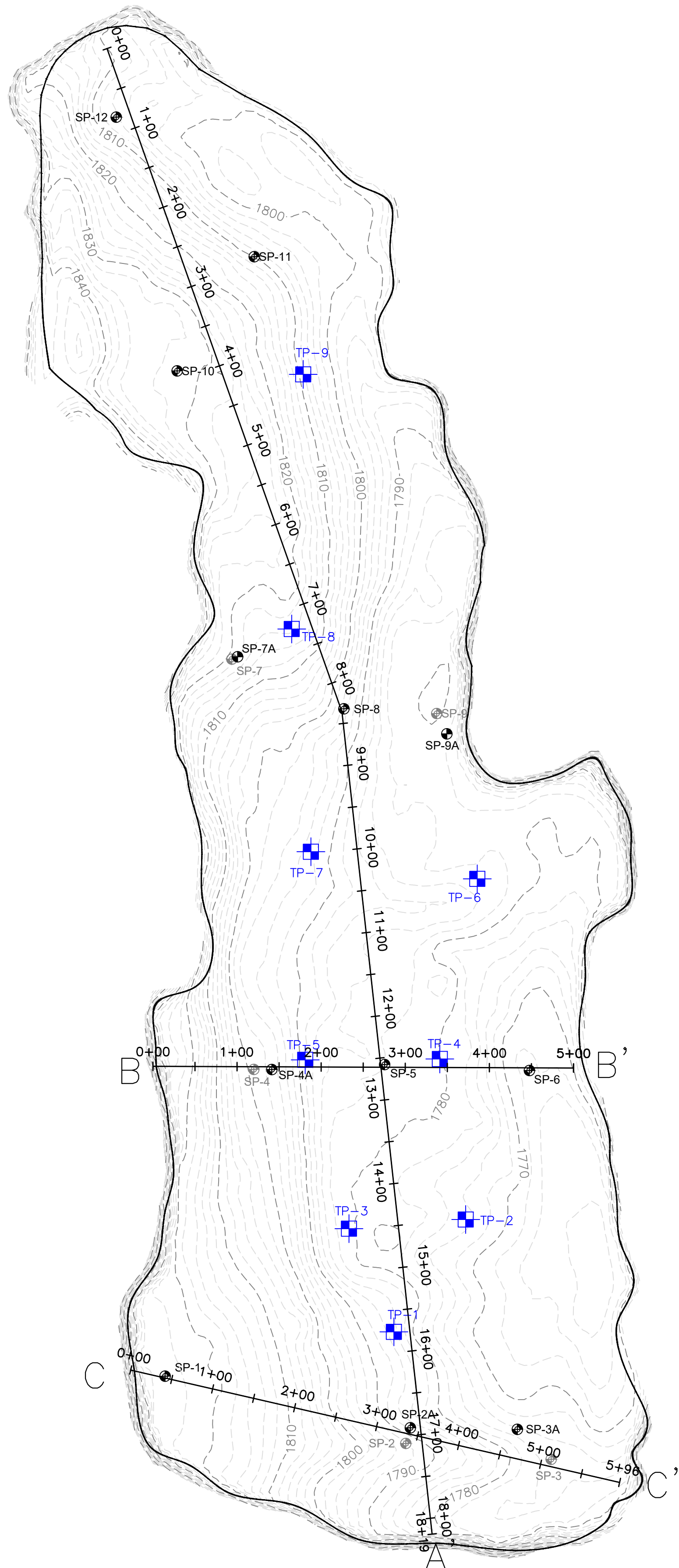
- LEGEND**
- MAJOR CONTOURS (EVERY 10')
 - MINOR CONTOURS (EVERY 2')
 - APPROXIMATE SIDEWALL LOCATION
 - SP-8 SETTLEMENT PLATE
 - SP-9 DECOMMISSIONED SETTLEMENT PLATE
 - TP-3 TEMPERATURE MONITORING PROBE

NOTES:

- GRADES SHOWN AS CONTOUR LINES ONLY WITHIN THE PERMIT 588 BOUNDARY. REPRESENT THE TOPOGRAPHY CAPTURED ON SEPTEMBER 11, 2025 BY SCS ENGINEERS.
- ANY DETERMINATION OF TOPOGRAPHY OR CONTOURS, OR ANY DEPICTION OF PHYSICAL IMPROVEMENTS, PROPERTY LINES, OR BOUNDARIES IS FOR GENERAL INFORMATION ONLY AND SHALL NOT BE USED FOR DESIGN, MODIFICATION, OR CONSTRUCTION OF IMPROVEMENTS TO REAL PROPERTY OR FLOOD PLAIN DETERMINATION.
- THE HORIZONTAL DATUM IS STATE PLANE VIRGINIA SOUTH ZONE NAD-83 (2011).
- THE VERTICAL DATUM IS BASED UPON NAVD-88.

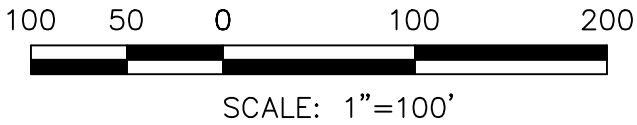


SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC. 1821 MIDCLOTHIAN TRPK. - MIDCLOTHIAN, VA 23113 PH: (804) 378-7440 FAX: (804) 378-7433	CADD FILE: SURF COMP		CLIENT CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY 2655 VALLEY DRIVE BRISTOL, VIRGINIA 24201		SHEET TITLE SEPTEMBER 2025 LANDFILL TOPOGRAPHY		NO.	REVISION	DATE
	DATE: 10/1/2026		PROJECT TITLE MONTHLY TOPOGRAPHY ANALYSIS SOLID WASTE PERMIT #588						
	SCALE:								
	DRAWING NO. 1								
PROJ. NO.: 2208.05		Q/A R/W BY: C/JW							
DATE: 10/1/2026		CHK. BY: C/JW							
DATE: 10/1/2026		APP. BY: C/JW							
DATE: 10/1/2026		DATE: 10/1/2026							
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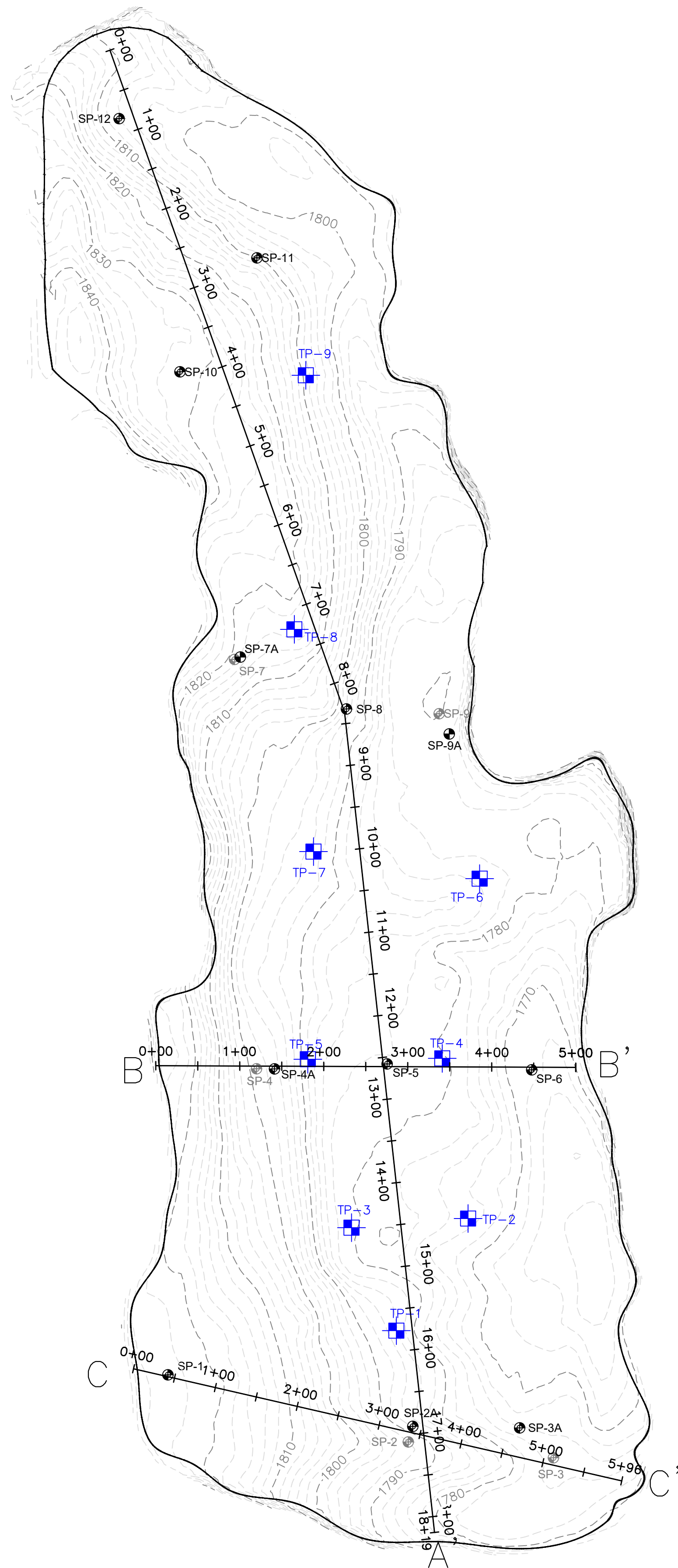


- LEGEND
- MAJOR CONTOURS (EVERY 10')
 - MINOR CONTOURS (EVERY 2')
 - APPROXIMATE SIDEWALL LOCATION
 - SP-8 SETTLEMENT PLATE
 - SP-9 DECOMMISSIONED SETTLEMENT PLATE
 - TP-3 TEMPERATURE MONITORING PROBE

- NOTES:
- GRADES SHOWN AS CONTOUR LINES ONLY WITHIN THE PERMIT 588 BOUNDARY REPRESENT THE TOPOGRAPHY CAPTURED ON JUNE 17, 2026 BY SCS ENGINEERS.
 - ANY DETERMINATION OF TOPOGRAPHY OR CONTOURS, OR ANY DEPICTION OF PHYSICAL IMPROVEMENTS, PROPERTY LINES, OR BOUNDARIES IS FOR GENERAL INFORMATION ONLY AND SHALL NOT BE USED FOR DESIGN, MODIFICATION, OR CONSTRUCTION OF IMPROVEMENTS TO REAL PROPERTY OR FLOOD PLAIN DETERMINATION.
 - THE HORIZONTAL DATUM IS STATE PLANE VIRGINIA SOUTH ZONE NAD-83 (2011).
 - THE VERTICAL DATUM IS BASED UPON NAVD-88.

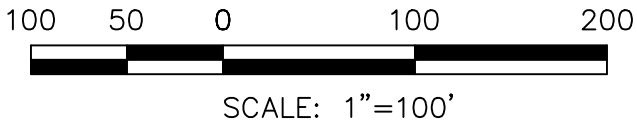


CLIENT CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY 2655 VALLEY DRIVE BRISTOL, VIRGINIA 24201		JUNE 2026		NO.	REVISION	DATE
		LANDFILL TOPOGRAPHY				
		PROJECT TITLE				
		MONTHLY TOPOGRAPHY ANALYSIS				
SOLID WASTE PERMIT #588						
SCS ENGINEERS STEARNs, CONRAD AND SCHMIDT CONSULTING ENGINEERS INC. 1827 W. 10TH AVENUE, SUITE 100 FARMINGTON, VA 23113 PH. (804) 378-7440 FAX. (804) 378-7433						
CADD FILE:		SURF1 COMP				
DATE:		10/1/2026				
SCALE:						
DRAWING NO.		2				
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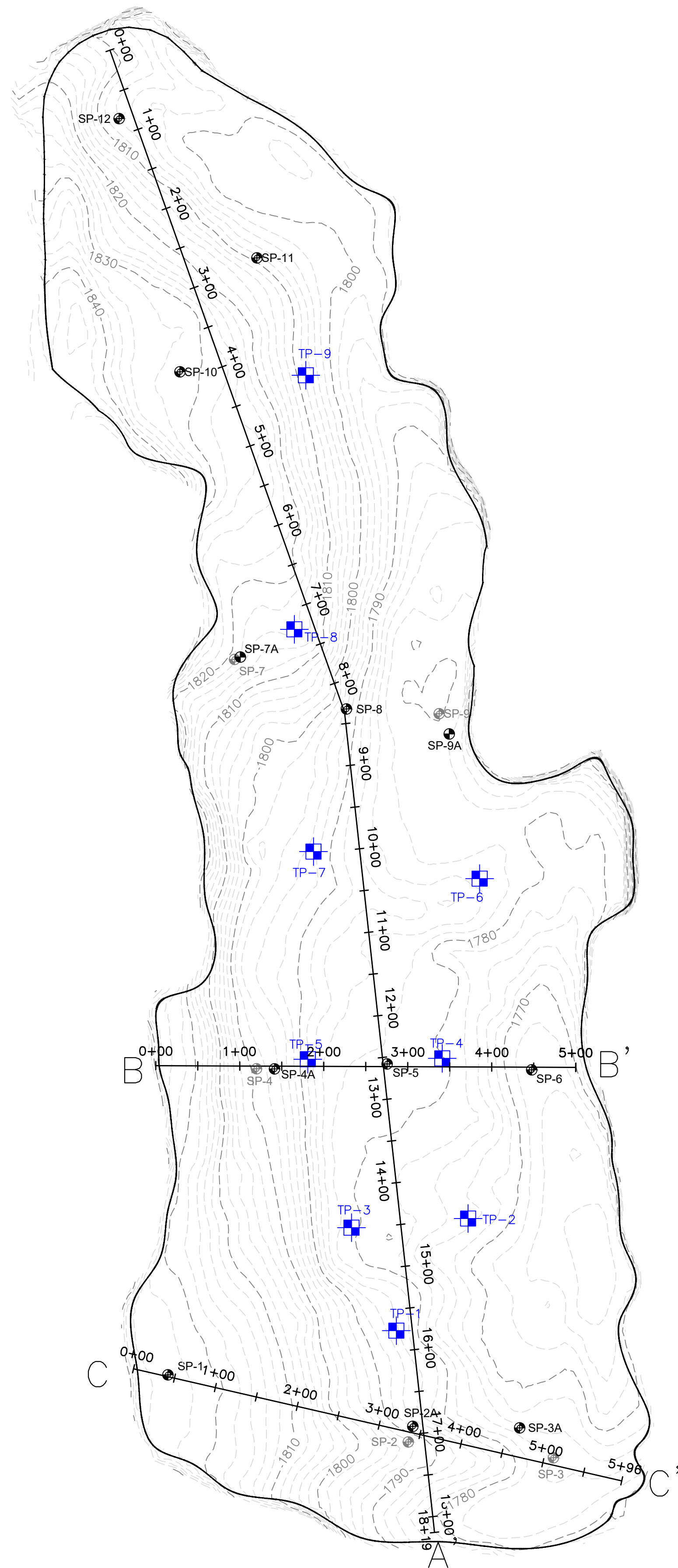


- LEGEND
- MAJOR CONTOURS (EVERY 10')
 - MINOR CONTOURS (EVERY 2')
 - APPROXIMATE SIDEWALL LOCATION
 - SP-8 SETTLEMENT PLATE
 - SP-9 DECOMMISSIONED SETTLEMENT PLATE
 - TP-3 TEMPERATURE MONITORING PROBE

- NOTES:
- GRADES SHOWN AS CONTOUR LINES ONLY WITHIN THE PERMIT 588 BOUNDARY REPRESENT THE TOPOGRAPHY CAPTURED ON AUGUST 7, 2026 BY SCS ENGINEERS.
 - ANY DETERMINATION OF TOPOGRAPHY OR CONTOURS, OR ANY DEPICTION OF PHYSICAL IMPROVEMENTS, PROPERTY LINES, OR BOUNDARIES IS FOR GENERAL INFORMATION ONLY AND SHALL NOT BE USED FOR DESIGN, MODIFICATION, OR CONSTRUCTION OF IMPROVEMENTS TO REAL PROPERTY OR FLOOD PLAIN DETERMINATION.
 - THE HORIZONTAL DATUM IS STATE PLANE VIRGINIA SOUTH ZONE NAD-83 (2011).
 - THE VERTICAL DATUM IS BASED UPON NAVD-88.



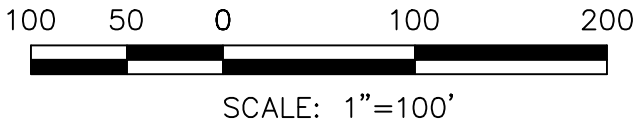
SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC. 1827 HUNTERS LANE, SUITE 100 BRISTOL, VA 22113 PH. (804) 378-7440 FAX. (804) 378-7433		CLIENT CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY 2655 VALLEY DRIVE BRISTOL, VIRGINIA 24201		SHEET TITLE AUGUST 2026 LANDFILL TOPOGRAPHY		NO.		REVISION		DATE	
CADD FILE: SURF1 COMP		DATE: 10/1/2026		PROJECT TITLE MONTHLY TOPOGRAPHY ANALYSIS SOLID WASTE PERMIT #588		△					
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- LEGEND**
- MAJOR CONTOURS (EVERY 10')
 - MINOR CONTOURS (EVERY 2')
 - APPROXIMATE SIDEWALL LOCATION
 - SETTLEMENT PLATE
 - DECOMMISSIONED SETTLEMENT PLATE
 - TEMPERATURE MONITORING PROBE

NOTES:

- GRADES SHOWN AS CONTOUR LINES ONLY WITHIN THE PERMIT 588 BOUNDARY REPRESENT THE TOPOGRAPHY CAPTURED ON SEPTEMBER 1, 2026 BY SCS ENGINEERS.
- ANY DETERMINATION OF TOPOGRAPHY OR CONTOURS, OR ANY DEPICTION OF PHYSICAL IMPROVEMENTS, PROPERTY LINES, OR BOUNDARIES IS FOR GENERAL INFORMATION ONLY AND SHALL NOT BE USED FOR DESIGN, MODIFICATION, OR CONSTRUCTION OF IMPROVEMENTS TO REAL PROPERTY OR FLOOD PLAIN DETERMINATION.
- THE HORIZONTAL DATUM IS STATE PLANE VIRGINIA SOUTH ZONE NAD-83 (2011).
- THE VERTICAL DATUM IS BASED UPON NAVD-88.



SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC., 1523 MIDLOTHIAN TPK - MIDLOTHIAN, VA 23113 PH. (804) 378-7440 FAX. (804) 378-7433 PROJ. NO. 2205.05 DRAWN BY: JMM CHECKED BY: C.JW DATE: 10/1/2026 O/A REV BY: C.JW APP. BY: C.JW	CADD FILE: SURF COMP		CLIENT CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY 2655 VALLEY DRIVE BRISTOL, VIRGINIA 24201	SHEET TITLE SEPTEMBER 2026 LANDFILL TOPOGRAPHY	NO.	REVISION	DATE
	DATE: 10/1/2026						
	SCALE:						
	DRAWING NO.						
	4			PROJECT TITLE MONTHLY TOPOGRAPHY ANALYSIS SOLID WASTE PERMIT #588	△		
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LEGEND

- MAJOR CONTOURS (EVERY 10')
- MINOR CONTOURS (EVERY 2')
- APPROXIMATE WASTE BOUNDARY
- SP-8 SETTLEMENT PLATE
- SP-9 DECOMMISSIONED SETTLEMENT PLATE
- 0.39 SPOT ELEVATION ON 100' GRID

-
- TP-8 TEMPERATURE MONITORING PROBE WITH AVERAGE TEMPERATURES AT DEPTH LESS THAN 200 °F
- TP-1 TEMPERATURE MONITORING PROBE WITH AVERAGE TEMPERATURES AT DEPTH BETWEEN 200 °F AND 250 °F
- TP-2 TEMPERATURE MONITORING PROBE WITH AVERAGE TEMPERATURES AT DEPTH BETWEEN 250 °F AND 300 °F

Volume		
Base Surface	TOPO	– August 7, 2026
Comparison Surface	TOPO	– September 1, 2026
Cut Volume	8,637	Cu. Yd.
Fill Volume	2,446	Cu. Yd.
Net Cut	6,191	Cu. Yd.

Number	Minimum Elevation	Maximum Elevation	Color
1	-20.000	-10.000	
2	-10.000	-5.000	
3	-5.000	-1.000	
4	-1.000	0.000	
5	0.000	1.000	
6	1.000	5.000	
7	5.000	10.000	
8	10.000	20.000	

NOTES:

1. THE ELEVATION CHANGES ARE CALCULATED BETWEEN THE AERIAL TOPOGRAPHY DATA CAPTURED ON AUGUST 7, 2026 AND SEPTEMBER 1, 2026 BY SCS ENGINEERS. POSITIVE VALUES (+) INDICATE AREAS OF FILL AND NEGATIVE VALUES (-) INDICATE AREAS OF CUT (SETTLEMENT). VALUES ARE ROUNDED TO THE NEAREST FOOT.
2. ANY DETERMINATION OF TOPOGRAPHY OR CONTOURS, OR ANY DEPICTION OF PHYSICAL IMPROVEMENTS, PROPERTY LINES, OR BOUNDARIES IS FOR GENERAL INFORMATION ONLY AND SHALL NOT BE USED FOR DESIGN, MODIFICATION, OR CONSTRUCTION OF IMPROVEMENTS TO REAL PROPERTY OR FOR FLOOD PLAIN DETERMINATION.
3. THE HORIZONTAL DATUM IS STATE PLANE VIRGINIA SOUTH ZONE NAD-83 (2011)
4. THE VERTICAL DATUM IS BASED UPON NAVD-88.

SHEET TITLE	SEPTEMBER VOLUME CHANGE AUGUST 2026 TO SEPTEMBER 2026
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PROJECT TITLE
MONTHLY TOPOGRAPHY ANALYSIS SOLID WASTE PERMIT #588

CLIENT
**CITY OF BRISTOL INTEGRATED SOLID
WASTE MANAGEMENT FACILITY**
2655 VALLEY DRIVE
BRISTOL, VIRGINIA 24201

2655 VALLEY DRIVE
BRISTOL, VIRGINIA 24201

SCS ENGINEERS
STEARN, CONRAD AND SCHMIDT
CONSULTING ENGINEERS, INC.

15521 MIDLOTHIAN TNPk - MIDLOTHIAN, VA 23113
PH. (804) 378-7440 FAX. (804) 378-7433

NO	CHISEL NO.	A/A D/M/Y
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Q/A RWB BT:	Q/A RWB BT:
CJW	VMM

CADD FILE:
SURF COMP

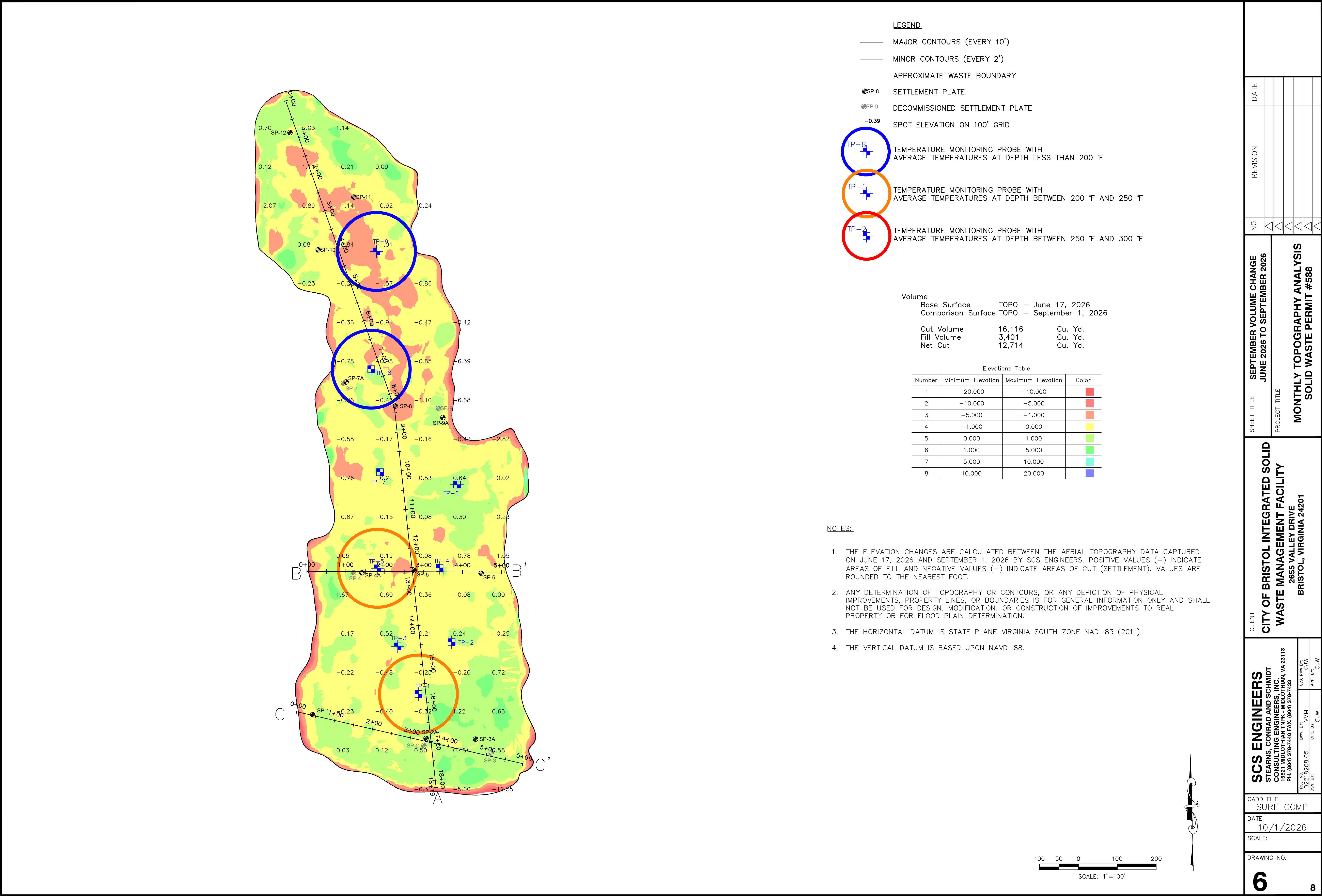
DATE:
10/1/2026

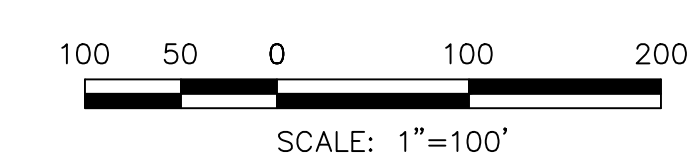
SCALE:

DRAWING NO.

5

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- | | | |
|--------------------|--------|----------------------|
| Volume | | |
| Base Surface | TOPO | – September 11, 2025 |
| Comparison Surface | TOPO | – September 1, 2026 |
| Cut Volume | 23,542 | Cu. Yd. |
| Fill Volume | 3,519 | Cu. Yd. |
| Net Cut | 20,023 | Cu. Yd. |

NOTES:

1. THE ELEVATION CHANGES ARE CALCULATED BETWEEN THE AERIAL TOPOGRAPHY DATA CAPTURED ON SEPTEMBER 11, 2025 AND SEPTEMBER 1, 2026 BY SCS ENGINEERS. POSITIVE VALUES (+) INDICATE AREAS OF FILL AND NEGATIVE VALUES (-) INDICATE AREAS OF CUT (SETTLEMENT). VALUES ARE ROUNDED TO THE NEAREST FOOT
2. ANY DETERMINATION OF TOPOGRAPHY OR CONTOURS, OR ANY DEPICTION OF PHYSICAL IMPROVEMENTS, PROPERTY LINES, OR BOUNDARIES IS FOR GENERAL INFORMATION ONLY AND SHALL NOT BE USED FOR DESIGN, MODIFICATION, OR CONSTRUCTION OF IMPROVEMENTS TO REAL PROPERTY OR FOR FLOOD PLAIN DETERMINATION.
3. THE HORIZONTAL DATUM IS STATE PLANE VIRGINIA SOUTH ZONE NAD-83 (2011)
4. THE VERTICAL DATUM(S) IS BASED UPON NAVD-88.

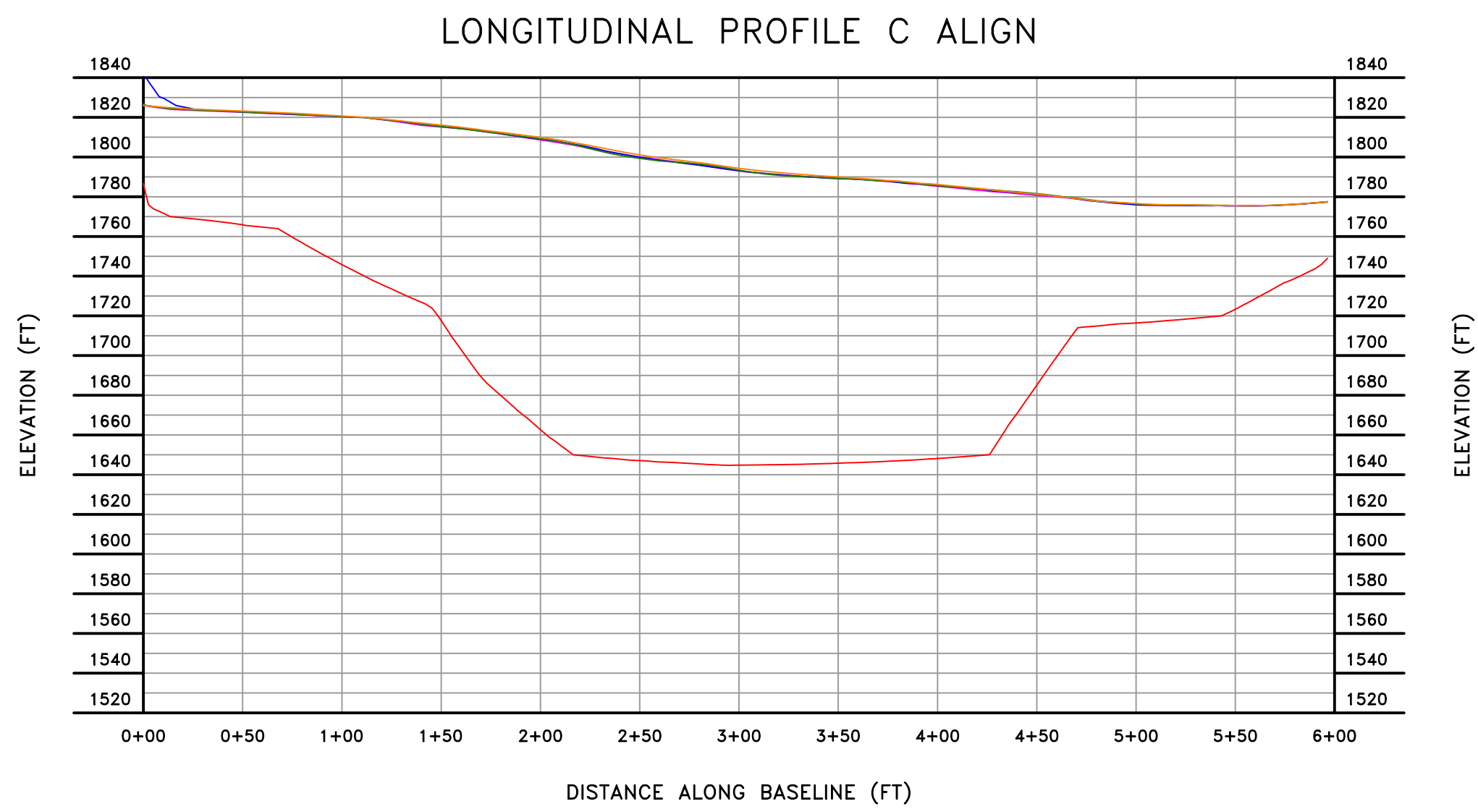
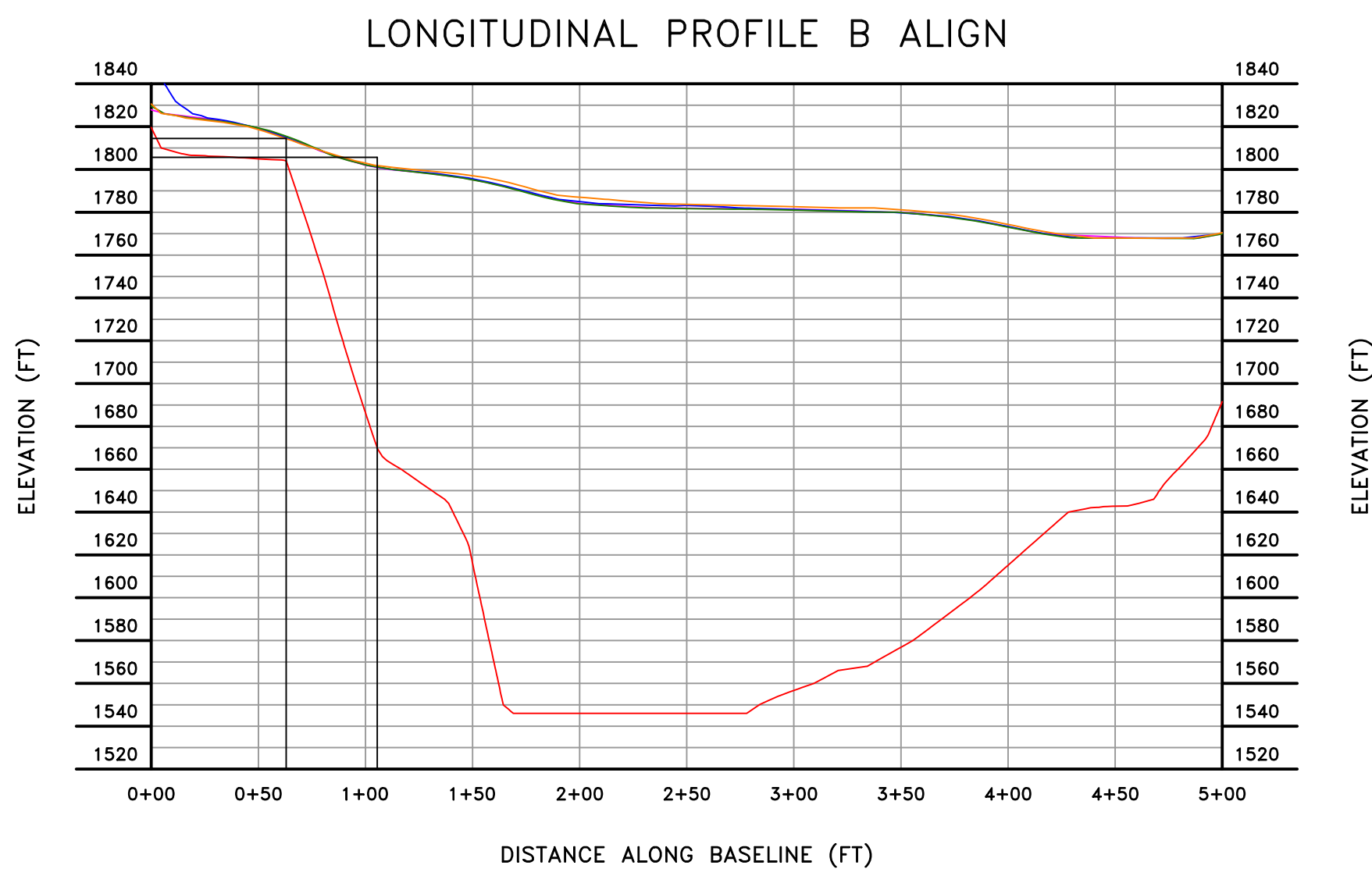
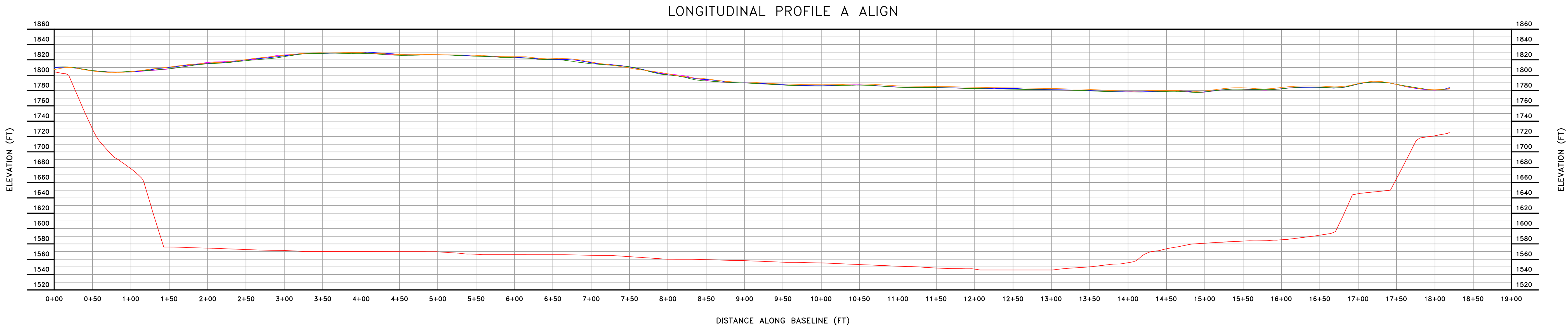
CLIENT

**CITY OF BRISTOL INTEGRATED SOLID
WASTE MANAGEMENT FACILITY**

2655 VALLEY DRIVE
BRISTOL, VIRGINIA 24201

SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC. 15521 MIDLOTHIAN TPK - MIDLOTHIAN, VA 23113 PH. (804) 376-7440 FAX. (804) 376-7433	NO.	218208.05	Q/A R/W BY:	VMM
	DATE	12/18/80	C/W	
	BY:		APP. BY:	
	CHK. BY:			

PREC	0	DS	0
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DATE: 10/1/2026			
SCALE:			
DRAWING NO.			
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- LEGEND**
- BOTTOM LINER ELEVATION
 - SEPTEMBER 2025 TOPO
 - JUNE 2026 TOPO
 - AUGUST 2026 TOPO
 - SEPTEMBER 2026 TOPO

SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC. 15521 MIDLOTHIAN TPK - MIDLOTHIAN, VA 23113 PH: (804) 378-7440 FAX: (804) 378-7433	CADD FILE: SURF COMP	
	DATE: 10/1/2026	
	SCALE:	
	DRAWING NO.	
CITY OF BRISTOL INTEGRATED SOLID WASTE MANAGEMENT FACILITY 2655 VALLEY DRIVE BRISTOL, VIRGINIA 24201	CLIENT	
	SHEET TITLE PROFILES	
	PROJECT TITLE MONTHLY TOPOGRAPHY ANALYSIS SOLID WASTE PERMIT #588	
	NO. REVISION DATE	
PROJ. NO. 2208.05 DATE: 08/20/2025 DRA. BY: C.J.W.	DWN. BY: J.M.M.	
	CHK. BY: C.J.W.	
	O/A RW BY: C.J.W.	
	APP. BY: C.J.W.	
8		8

APPENDIX F | LFG DEWATERING PUMP STROKE COUNTER DATA ANALYSIS

STROKE COUNTER DATA ANALYSIS

During the monthly liquid depth measurement event and during LFG monitoring, SCS collected stroke counter data from the pumps installed in the GCCS extraction wells. These stroke counts were collected from 21 wells from August 31, to September 30, 2026. The recorded stroke count data from each well during August is included in **Table G-1**.

Based on the number of strokes in each well, SCS can estimate the number of gallons of liquid pumped from each well to assess pump performance. SCS assumed that each stroke from a float-style pneumatic pump correlates to approximately 0.3 gallons of liquid removed from the well. Blackhawk piston-style pumps remove approximately 0.11 gallons per stroke.

Table G-1 Summary of Dual Extraction Well Pump Stroke Counter Data

Well	8/31/2026	9/30/2026	# of strokes between measurements	Estimated liquid removed (gallons)
EW36A			-	0
EW49	174256	180610	6,354	1,906
EW50	1785485	2011896	226,411	67,923
EW52	170840	170840	-	0
EW53			-	0
EW54	126174	126174	1,335	401
EW55	321589	321696	107	32
EW59	4202836	4203014	178	53
EW60	477876	487800	9,924	2,977
EW61	363666	375991	12,325	3,698
EW62	273526	274483	957	287
EW65	262215	262309	94	28
EW66	1542500	1584803	208,927	62,678
EW67	746185	788514	42,329	12,699
EW68	2822878	2822878	-	0
EW76			-	0
EW78	726496	811471	84,975	25,493
EW82			-	0
EW85	407195	410074	2,879	864
EW87	340749	340749	-	0
EW88	490472	490472	-	0
EW93	1409957	1409957	-	0
EW94	2073539	2077803	4,264	1,276

EW98	3743519	3848612	105,093	31,528
TP-4	27755	27755	-	0
Total Estimated Liquid Removal				211,846